

Welcome to

Photography for Beginners

Most of us are familiar with the concept and practice of taking photographs – whether on a camera or a smartphone. However, knowing how to take a good photo requires knowledge, patience and skill. This seventh edition of Digital Photography for Beginners makes it easy for you to master your camera and start taking better photos. From guides to get you started in the basic principles to step-by-step tutorials on using your camera's modes and settings, this is an essential handbook for budding photographers. Once you've grasped the basics, we give you detailed insight into how to take excellent photos in all the major genres, from portraits to astrophotography. The book also includes brand new starter projects for you to get your teeth into that will help you get creative with your camera, top image-editing tweaks and the best ways to share your photos. Don't forget to check out the free online assets on FileSilo, packed full of useful tutorials and resources. This ultimate guide to photography will get you taking greatlooking shots in no time, so let's get started.



Photography for Beginners

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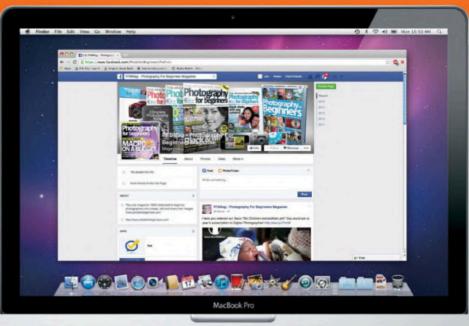
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Reduce noise in your indoor shots

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Project your pictures Share you cameraphone captures with a projector

Store and share your photos in the cloud Use Dropbox to back up, store, access and share your photos

Prepare your photos for print

> Get your snaps up to scratch and looking their best

Create photo books online Make a lasting keepsake using online resources







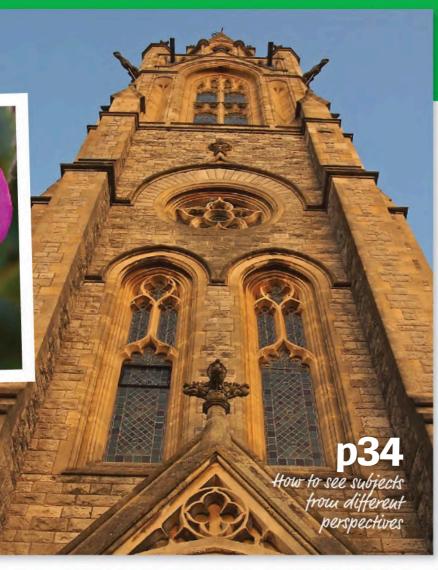
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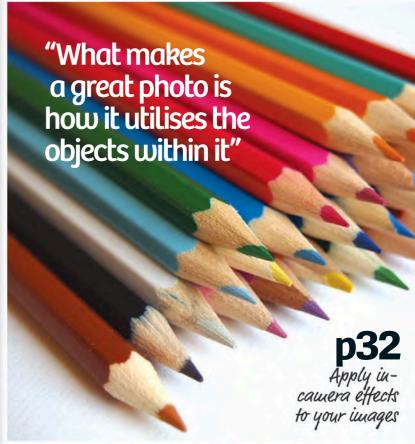


An introduction to the essential techniques you need to master

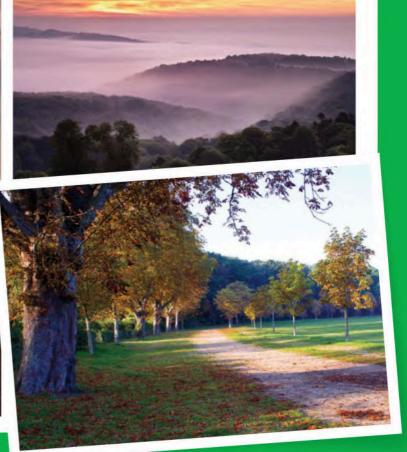
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Correct exposure

Leading line

started with photography

In this ultimate guide, we take you through the essential skills and techniques needed to take the perfect photo

Taking your first steps in photography need not be a daunting venture. By following a simple set of guidelines you can be on your way to taking fantastic shots in no time at all.

Photography is a very broad subject, which can encompass everything the world has to offer. It is therefore difficult to give definitive steps as to what will make a good photo. However, despite this, it is important to consider how you are photographing your subject or scene, and the different aspects of what is being shot that will make it a good photo.

Composition is important in every area of photography, and generally refers to how the subject is framed in order to make a compelling photo. Along with many aspects of composition, leading lines can draw the eye through a photo, and encourage the viewer to take in the whole scene. Having an interesting focal point is key.

Lighting is a very important part of photography, and exposing the light correctly is a fundamental step to achieving a good photo. Therefore something as simple as shooting at the right time of day can have a huge effect on how the scene looks.

These are the core things to consider when taking your shot and when you get these things right you will create some great imagery. We show you how...

Lighting Using only harsh natural light, this scene has been evenly lit across the entire range Composition Simple composition has placed an even amount of sky and foreground in this shot, using a leading line to force the eye across the scene "Exposing the light correctly is a fundamental step to achieving a good photo" **Focus point** Having a main point of focus is important as it gives the eyes something to focus on when first looking at the image WorldMags.net Digital Photography for Beginners 11

Natural light Natural light is often the most flattering form of ight to use, as it gives





Bounce the light

Artificial light Artificial light is often us when shooting indoors of

light available. It can be used effectively to light the







the middle of the day, as well



Sometimes a lack of light can also make for dramatic es, but they can be hard to master. Try a night-time setting on your camera or use a higher ISO to let more light onto the camera's senso



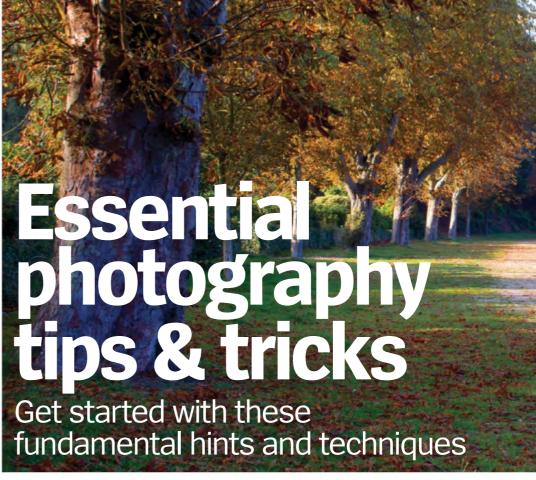


Lighting Make sure the light is right

Lighting is very important in photography, as you are capturing light in every photo you take. It is therefore important to consider its implications before taking each shot.

There are benefits from different types of lighting, be it artificial or natural, and using the light to your advantage will help you to get the best image possible. Adding artificial light in the form of a camera flash can help to brighten up a scene where natural light is not available

On the other hand, when using natural light, it is important to consider the ideal times for the best results. Harsh sunlight can make a photo look flat and unattractive, which therefore makes shooting in the middle of the day very undesirable.



Composition

A good composition is the first step to a great photo

The composition of a photo determines how you photograph the scene. Such things as the angle and lighting of the shot are forms of composition, and parts of the foundation upon which your photo is created.

When taking a photo, it is important to consider the composition, how the photo will look, and what you are trying to show with

the shot. The position of the main subject in the frame is key, and the correct placement can enhance the overall look of the photo. It is important to make the shot visually interesting, while encouraging the viewer to scan the entire image. Using leading lines and the correct lighting will do this, making

Top tips for great shots



Distracting backgrounds

Even the best shots can be ruined with a distracting background. Although it may not seem important, ensure you have a good backdrop to your photo, regardless

Correct lighting

The lighting is important regardless of the type of photo. A badly lit. or under exposed. image will not be pleasing to look at, and will not present the subject very well.



Rule of thirds

Use the rule of thirds when composing for a more balanced image. Place your main point of interest a third of the way up and preferably off-centre. This rule can be broken but this composition most often results in the better shot.

for a better photo.



Focus point

Make sure you have a main point of interest in your image, ensuring the camera's focus is placed carefully upon this point. This will be something that acts as the ain attraction to the photo



Leading lines

ur subject and how you want to portray it in the photo before firing away. When framing the shot, use leading lines to draw the viewer towards the subject.



Exposure

The exposure of an image dictates light levels

Your camera's exposure essentially tells it how much light to let in when taking the photo. The amount of light that is let in then determines how bright or dark the image will appear once it has been taken.

It's important to realise that exposure is one of the fundamental parts of photography, and that learning how to master it will go a long way to ensure you get the best photograph each time you press that shutter.

There are several settings primarily formed around correctly exposing the photograph, and these settings can be manually or automatically controlled.

Ultimately, an image which comes out too dark is commonly referred to as being underexposed, while an image which is too bright is referred to as being overexposed.

Aperture

The aperture is determined by the lens on the camera. With interchangeable lens cameras, the different lenses will have different maximum apertures available.

The aperture determines how 'open' the lens is, and thus how much light can be 'seen' by the camera's nsor when a photo is taken.

The aperture is set using 'f-numbers'. The lower the f-number, the wider the aperture, allowing lots of light in to the camera.

The aperture can also be used to create different depths of field. This is how much of the scene is in focus Using a wide aperture, such as f2.8, the main focus point will be in focus with the rest of the scene carefully blurred. Using a larger f-number will allow the entire photo to be in focus

Shutter Speed

Shutter speed determines for how long the shutter is open, and therefore for how long the photo is taken. Many cameras allow shutter speeds from fractions of a second to 30 seconds. Using a fast speed means the photo is taken quickly, so you can freeze motion in its place.

Shutter speed also dictates how much light is let in to the camera. The slower the shutter speed, the more light gets on to the sensor, but leaving a shutter open for a long time will introduce movement blur

Teaming up the correct shutter with the lens aperture can allow you to correctly expose an image

The ISO value determines how sensitive the camera's sensor is to the light being let in. The various other settings available determine how much light is let on to the camera's sensor, and the ISO value dictates what the sensor then does with this light.

A higher ISO value will make the camera more sensitive to the light. allowing for a much brighter image. The camera will therefore be able to use a slower shutter speed, or a larger f-number, when coupled with a

A lower ISO will make the sensor less sensitive to light, however it will also produce a more crisp image Larger ISO values can commonly introduce an unwanted grain or 'noise' effect, generally ruining the look of a photo

It is therefore important to utilise the ISO setting to ensure an image is well exposed, but without sacrificing image quality.

Histogram

A histogram is a graph that displays the light levels across the photo, from black on the left to white on the right. The different heights along the graph display how many pixels sit at that light level. So a brighter overall image will move the graph more to the right, and a darker one to the left.

Most digital cameras allow you to view a histogram once an image has been taken, so you can use it to get an even exposure across the range

White balance

Getting colours accurate

Your camera's white balance can affect the overall tone of your photograph, and is therefore important to consider when choosing your settings.

The white balance is a function that goes about removing the different colour casts created by the lighting in the scene. In simple terms, it is used to ensure the colours in the scene are as accurate as possible. The white balance does this by measuring the colour temperature of the photo and adjusting the colours accordingly.

Colour casts can be very common in harshly lit conditions, especially when shooting in bright sunlight or with artificial light, such as on camera flash. Taking control of the white balance will allow you to improve your photos within a range of lighting conditions.

Cloudy

The Cloudy



Tungsten This white bala

the photo and removes



Flash

flash, the shot can be quite washed out and cool. This white balance setting therefore compensates for the



Shade

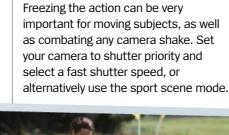
covered by lots of shade has a cooler look, with a flat tonal range. The Shade white balance setting warms up the

Photography FAQ

We answer the most common questions asked by beginner photographers

How can I ensure my horizon is kept straight?

A wonky horizon can really distract from a photo, so ensuring it is straight is very important. Many cameras come with a grid overlay function, or a spirit level that will ensure your photo is perfectly straight.







How can I freeze the

action at a sport event?

What is the best time of day to take an outdoor portrait? Natural light can be very difficult to use effectively, because you are unable to control its effect on your subject. For the

most flattering light, you should shoot shortly after sunrise or just before sunset.

When taking a portrait, where is best to focus?

Rather than simply leaving it up to the camera to choose focus, take control and set it vourself. Place the focus point over the eyes of the subject, because this is where we naturally look when viewing the photo.





Is it best to zoom in or crop the shot afterwards?

Zooming in can allow you to retain the full image resolution of the photo, however it is much harder to capture the shot effectively this way. If you have a lot of megapixels to play with, you may find that shooting further out is slightly more beneficial.



Is there a way of using the flash for more even results?

Using a camera's flash can sometimes give harsh results. However, coupling the flash with natural light can actually allow you to fill in the darker shadows, and ultimately achieve an evenly lit photo.

How can I isolate my subject from the background?

Isolating your subject from the background can sometimes be extremely beneficial and is, in fact, quite simple to do. Select the aperture priority setting and choose a low f-number. This will consequently throw the background out of focus while keeping the subject nice and sharp.



What can I do to avoid blurry images?

Blurry images can be the result of many things. Commonly it is down to camera shake, so try using a faster shutter speed, a lower f-number, or a higher ISO, all of which will speed up the camera, eliminating camera shake.



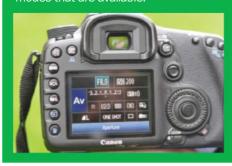


How can I take better indoor shots?

Indoor photography can be very difficult, due to the light available. Try using a tripod or resting the camera on a surface which will hold the camera still, allowing it to soak up the available light for an evenly exposed photo.

How do I make the most of my camera and get better all-round photos?

Learning the different functions and features of your camera will help you make the most of what it has to offer. Experiment with the manual modes, as well as the many automatic scene modes that are available.





If your camera can change lenses, you will likely use a combination rather than a single lens, such as this Nikon 18-55mm f3.5-5.6G (www. europe-nikon.com). Ensure you have

lenses that cover each focal length so you can photograph any subject



most important pieces of kit. Ensure you have enough memory cards, such as this one from Samsung (www. samsung.com), so you are never caught short of space



Essential kit for beginners

Your accessories are very important, and allow you to work better as a photographer

Editing software

Editing software is becoming more and more popular, and is extremely useful in modern photography. Programs like **Photoshop Elements** (www.adobe.com) can enable you to apply basic filters, effects and fix problem photos



Choose a camera

The essential guide to picking the right equipment

Cameraphones

Mobile phone cameras are a convenient option and are becoming more advanced

Pros & cous

Mobile phones are usually to hand, meaning you won't miss a photo opportunity

The device is very small and discreet, meaning you can carry it with you everywhere you go.

The new smartphone range offers countless downloadable camera prove your shots.

The smaller sensors mean image quality is not going to be as good as if taken on a dedicated camera.

The fixed lenses are quite limiting with what can be captured.

Cameraphones have limits in what they can achieve, therefore factors such as low light are not ideal.

Cameraphones are starting to catch up with the competition, such as the Nokia Lumia 1020 here (www.nokia.co.uk) which comes with a 41MP camera. The convenient size with their increased level in performance is making them more and more popular.

Cameraphones commonly have small sensors, which means they have limited pixel quality. However, they are still able to produce excellent photos in the right conditions. Another limitation is that the lens fits within the device's body, meaning there's not much possibility of a decent zoom.

However, the newer smartphones now have apps to improve their performance, and this ability to customise is encouraging more users to adopt them as primary cameras.

The lens of a cameraphone is fixed in place in order to fit within the device. It therefore will have a fixed optical zoom range making it more suited to

Cameraphones utilise the device's large LCD screen, which makes composition and fine tuning of the settings very easy



Downloadable

n using a smartphone you do not need to simply stick to the original camera app. You are able to download and use apps features and controls

On-screen controls

The controls for the came are commonly operated using the device's touch-screen. Touching to focus and zoom are now common features found on the newer

Fixed lens cameras

Compact cameras and superzooms are basic all-round cameras for any situation

Compacts and superzooms are often referred to as point-andshoot cameras, as this is what they are primarily designed for. They are billed as easy-to-use cameras that are suitable for all types of basic photography.

They commonly come with a host of automatic settings, designed to do the work for you when taking a photo. They also

will need.

usually come equipped with a general-

purpose lens that is designed to cover

the focal lengths that the average person

Compacts and superzooms generally

do not offer a range of manual settings, and do not come equipped to use

external accessories. They are simple cameras that are designed with the consumer in mind. However, with the

advancement in photography, compacts

and superzooms are adopting more and

Panasonic TZ60 pictured here (www.panasonic.

co.uk), for example, comes with image stabilisation,

more advanced technology. The

Intelligent Auto mode and HD video.

Pros & cous

Compact cameras are, by name, small in size, making them convenient to keep with you.

There is an array of automatic and scene modes, making all types of photography quick and simple.

Fixed lens cameras are generally cost-effective when compared to higher-spec

Due to sensor size, image quality is not as good as CSC or DSLR cameras.

Most fixed lens cameras will lack manual control, meaning everything has to be shot in an automatic mode.

Due to their simplicity, fixed lens cameras are not built to be used with accessories such as filters.

Controls

Many fixed lens cameras are designed around ease of use, therefore placing all of the necessary settings at easy-to-use places, while leaving more advanced features in the menus

LCD

Fixed lens cameras do not commonly come with a rear LCD for both photo composition and changing any of the camera settings

Flash

Fixed lens cameras come with a built-in flash located on the front of the body This is designed as a you to take photos in darker conditions



Shutter release

As with almost any digital camera, a compact comes equipped with the basic shutter release. This will allow you to half depress it to focus and fully press it to

Lens

The lens on a compact camera is fixed to the body, and therefore cannot be changed. Commonly the lenses will allow for a fairly extensive amount of zoom, offering wide angle to medium telephoto

Compact system cameras

Compact system cameras are a new, yet popular alternative to larger DSLRs

Compact system cameras (CSCs), such as the Olympus PEN E-PL5 pictured here (www.olympus.co.uk), are built to allow for DSLR quality images, but with the simplistic nature of a compact camera. Commonly they will utilise the available automatic and scene modes, as well as include a

variety of creative filters. However, unlike compact cameras they Pros & cous also include the manual shooting

modes found on DSLRs.

Another key feature of the CSC is that it has interchangeable lenses and accessories. The lenses therefore dictate the focal range and apertures available, replicating that of a DSLR.

The image quality of CSCs are also fast becoming as good as DSLR cameras, as they utilise the larger APS-C size image sensor and begin to use more advanced optics, altogether making them a popular choice for both beginners and more advanced photographers alike.



Manual controls Although they are not always located in the same place, the many different controls can often be found on the top of the body, very much in the style of a

Interchangeable lenses

Compact system cameras have interchangeable lenses, allowing the lens to be swapped for alternatives available. The lens therefore dictates the focal ranges available and the aperture values

Larger sensor

The image sensor used in most Compact system cameras is the APS-C sized sensor, the same one you'll find in most DSLRs, providing excellent image quality

LCD screen

Around the back of the camera will be an LCD screen. Much like a compact camera, this is used for composing the shot as well as adjusting all of the camera's settings

DSLR cameras

Compared to a DSLR, compact system cameras (CSCs) have a very compact body.

more simplistic cameras, CSCs are very

quality is very good.

system to use.

Being based around

Due to having the same sensor as most DSLRs, the image

Even when compared to beginner DSLRs, CSCs can be an expensive

Due to their relatively recent introduction, there is only a handful of lenses available.

Despite being geared towards a more

towards a more advanced camera, they still

ctionality as a DSLR

Pros & cous

Due to the large sensors, image from DSLRs is

DSLRs provide full manual control, allowing you to determinhow the photo looks.

There are countless

accessories and lenses that can be used to make it more efficient.

DSLRs are an expensive

specially when coupled with

They are difficult to use

for beginner-level ographers due to their ual controls.

es and accessories

system to use.

do not offer the same

At the forefront of image quality, utilising large sensors and high-quality lenses

DSLRs are well-built, professional-level cameras designed to produce images of the highest quality without compromise.

Although most come with automatic modes that allow you to quickly utilise the camera's abilities, they are primarily designed to be used with full manual settings to capture shots that look exactly how you

want them to.

Most people use DSLRs not only for the higher image quality, but also for the level of control that you are able to have over how the image looks. There is also the large benefit of using multiple lenses, as well as a vast range of accessories - all designed to allow you to achieve the photos you want.

DSLRs are not necessarily built to be beginner friendly, although the entry-level models such as the Canon 1200D (www. canon.co.uk) pictured here are attempting to bridge the gap. They can be expensive, and accessories such as lenses can push past the budget of most photographers who are just starting out.



Accessible controls

DSLRs are designed to be very intuitive, and therefore have the majority of their controls externally placed on the camera body to allow them to be adjusted quickly

Interchangeable lenses

The lenses used with DSLR cameras can be removed and changed for others which may offer different focal lengths as well as higher-quality glass optics

Viewfinder

All DSLR cameras come with a viewfinder, allowing you to look through the line of sight of the camera, making framing and composition much more intuitive

LCD DSLRs also come equipped with an LCD, designed to allow settings to be changed, images to be played back, and more recently to be used in Live View mode over using the viewfinder

DSLRs are large in size, making them difficult to have to hand at every oto opportunity.



Your first photo shoot

A step-by-step guide to getting a great shot on your first photo shoot

Taking photographs may seem like a simple process, and one which does not need much thought. Where this is true of simple snapshots, it takes a lot more thought to get great photos each time.

Many great subjects cannot be captured well with simple snapshots, and it requires more control of the camera and subject to get the most out of them. Good photos take time to capture, and are the work of the photographer as much as the camera.

Before simply taking the photo, consider the composition you wish to use, the lighting of the surroundings and what you want to present with your photo. You will then be able to focus on the camera setup, and go through the process of adjusting the settings to your preference.

Setting up your very first photo shoot can be a daunting task. However, by laying out the steps one by one, it is an easy process that will let you take control of how your shot comes out.

Follow this basic step-by-step tutorial of how to take great photographs every time, and you should be rather pleased with the final result.

Equipment needed: DIGITAL CAMERA | TRIPOD | SUBJECT | EDITING SOFTWARE



Consider the lighting Look at the lighting before taking a photo. It will determine what settings to use, as well as the outcome of the shot. This shot is badly lit, so we moved to a different flower in better light.



Apply in-camera effects

If you want to add effects, do so now. Most compacts come with a range and DSLRs have some options. Choose the effect from your menu screen.



Set up a tripod L Using a tripod is often essential. Attempting to hold the camera still while focusing on the subject can cause you to lose the focus or end up with a blurry image.



Focus the camera Ensure the subject is in focus. This can be done by allowing your camera to focus automatically by half pressing the shutter or manually adjusting the focus.



Compose the shot When composing there are principals that can be followed, like the rule of thirds. Make sure you think about these at this stage as they can help to better frame the subject.



Take the photo When taking any shot, be careful not to move the camera too much, but to retain the original composition and focus, ensuring the shot comes out as originally planned.

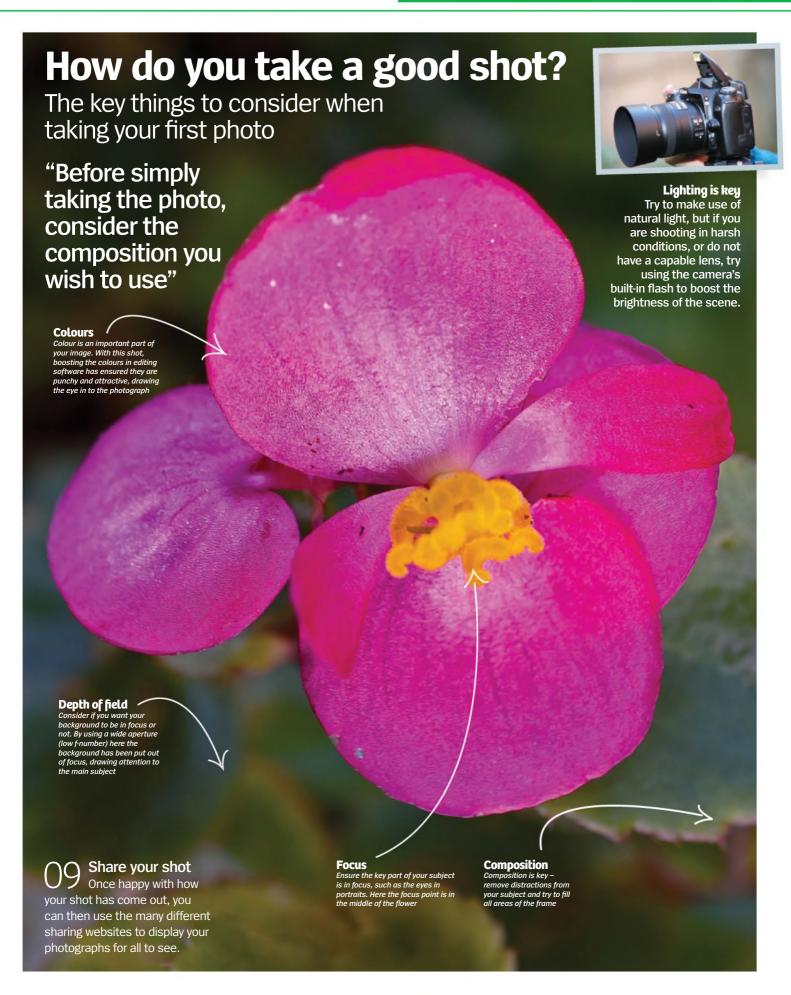


Change the + settings

Use the correct settings for your subject. Consider what is needed to get the correct amount of light, and how you want to represent the scene.



8 Edit the image Editing can offer simple but effective improvements. Cropping in to the main subject, straightening a horizon, or sharpening a portrait can have a huge effect to the overall look.



Compositions Compositions

Discover how a new composition can dramatically alter your photo

Photography isn't just about getting your camera settings correct or being in the right place at the right time. A lot of what makes a photo great is down to how it utilises the objects within it. By taking one subject and shooting it in a variety of ways, you can see what a difference composition can make.

Think about angles. Try shooting a portrait straight-on, and then shooting it at an exaggerated angle - the angled image looks more modern and dynamic. In a landscape, try shooting lying on the floor to exaggerate the foreground, then shoot standing up and see the difference. Your zoom can help with composition too. Shoot your scene at both the widest angle and the telephoto (full zoom) to pick out little details in a scene.

Whatever you shoot, try to think about different ways you can photograph the same scene and experiment!

Shooting these flowers from above creates a

irly uniuspiring image



Get up close to your subject for a wacro shot like this





Master your camera's Shutter speeds to produce creative effects

The shutter speed dictates the amount of time the camera's shutter is open for. Changing your shutter speed produces a range of effects, and certain areas of photography take advantage of this. Sport photographers can use a high shutter speed to freeze the action, or you can use slow speeds of one second, for example, on a subject such as moving water and its surface can be softened and blurred for a creative effect.

There's no better place to experiment with shutter speed than in nature. This is where you can take your time composing a scene and playing

with exposure for the best image. We try out three different shutter speeds on this waterfall to see how each one looks. You'll notice that as the shutter speed gets quicker, more detail in the water is captured. If you have a tripod handy, set your camera to Shutter Priority or Manual mode and work your way up through the shutter speeds.





Alter your Aperture

Take control of your shot's depth of field

Aperture plays an important part in photography as it dictates how far open the lens is and therefore how much light it takes in. This is set in 'f' numbers — the lower the number the wider the aperture, allowing more light to be let in.

The aperture can also be used to create different depths of field. This is

how much of the scene is in focus. Using a wide aperture, the main focus point will be in focus, with the rest of the scene blurred. Using a larger f-number will allow the entire photo to be in focus.

For portraits especially, many photographers will blur the background behind the subject, so as to remove any

distracting elements. But sometimes keeping the background sharp has its advantages too, just in case something interesting may be happening around the subject.

We shoot three different approaches to capturing one portrait so you can see how aperture effects the overall look.





Understand White balance

How this setting will drastically change a photo's colour

White balance refers to how the camera reads what type of light is being used for an image. Although this isn't something we usually think of on a day-to-day basis, the correct white balance setting can make all the difference. The idea of white balance is that a certain colour of light is offset with another colour, such as blue or red. Work your way through the various settings, such as Flash, Cloudy, Daylight, Tungsten and Fluorescent, and you'll notice a significant change in the colour of the image.

We look at the same close-up shot of this chessboard, but using the camera's Flash, Auto and Kelvin white balances. Shooting under flash lighting, the obvious choice is the first one of the three, but it's interesting to see how the camera performs on Auto, and also how adjusting the setting manually creates a more artistic effect.

"The correct white balance setting can make all the difference"

Flash white balance is the correct setting for when you are shooting with flash. Results are natural and well balanced, as if shot in daylight





Experiment with Lenses

Take one subject, one camera and three lenses, and you will create three very different photos. If you've invested in a DSLR or compact system camera, chances are you'll have just one lens - the 18-55mm (or thereabouts) kit lens that came with the body. But what lens do you buy next and what can you achieve with it?

We're here to show you how a prime wide angle, a high zoom telephoto and a creative fisheye lens could change or improve your photography by making you think differently about the way you compose. Each lens has its strengths and weaknesses, and knowing how to use yours will make you a better photographer. For instance, with fisheve lenses you need to use the edges and the angles - high or low - to achieve a creative effect. Experiment with your lenses and you may be surprised at what you can achieve.

Discover how a lens can

change your photo

"Each lens has its strengths and weaknesses, and knowing how to use yours will make you a better photographer"

> Zoow in on small details and use aperture to play with light exposure

28 Digital Photography for Beginners



The choose the right Learn to shoot stunning images at any time of day

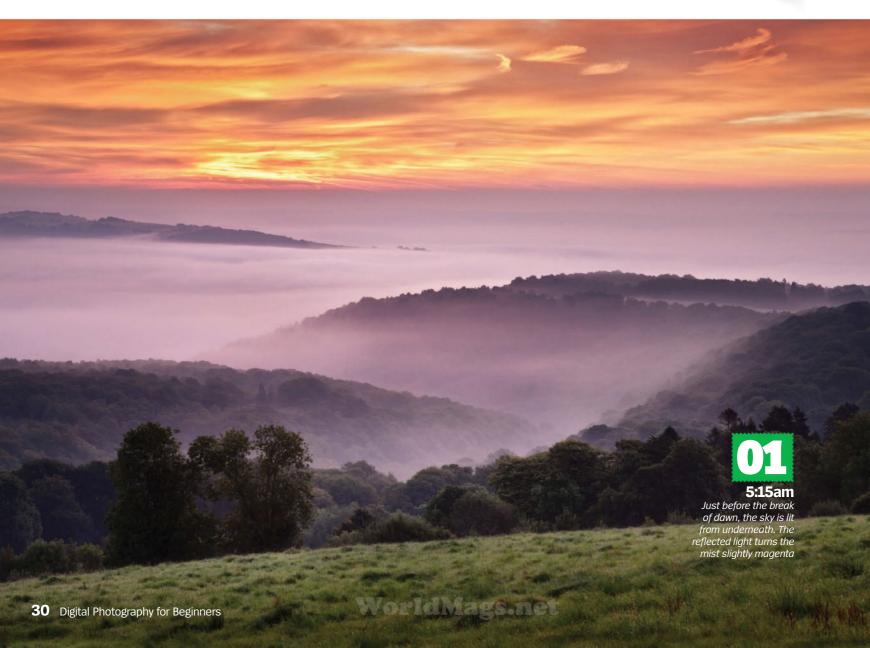
Landscape photography is all about shooting when the light is just right. Arrive at the right time and the sun can change and shape the land from the ordinary into the spectacular, so it's important to know just when to strike.

Dawn shoots can often be a real struggle, but it is this time of the morning when magical elements like fog and mist can occur. Staying in bed for those few extra minutes can become 'make or break', so set your alarm clock early and get to a viewpoint three quarters of an hour before dawn.

After the peak of colours, the sunrise changes drastically. As the sun rises it loses its golden colour, the saturation fades and the light levels increase sharply. Don't be surprised if the conditions change entirely, just like this scene. Make the most of the changing light and witness the action unfold, instead of imagining what could have been.

If you're creating a suurise scene, wake sure you choose a suitable white balance







Apply in-camera Effects Breathe new life into images with pre-set art effects

Some cameras come with a variety of fantastic art effects and filters that will totally change the way your photo looks. Even if you're shooting with a cameraphone, there's a host of apps that replicate these effects to download and enjoy.

If you're shooting portraiture, you should think about effects like soft focus, pop art and sepia, while landscape lovers will probably want to use the miniaturise, selective colour and fisheye effects.

To get the best out of these effects you will need to know how to use them. For

instance, fisheye effects work best when you use the edges of the frame, while soft focus needs you to focus on the central areas more. We recommend shooting the same subject with all the effects your camera offers and then look at them to see which ones work and which ones don't. Experiment and have fun and you'll find that in-camera effects will help you create your best-ever photos.

This is the original shot - without any added effects











Shoot from different Perspectives

The same scene shot by different people can result in dramatically different photos

We all see the world in different ways, and our unique take is what we try to capture in our images. There's no right or wrong way to view a subject, which is why we challenged three photographers, with three different skill sets, to shoot the same subject and see what each of them came up with.

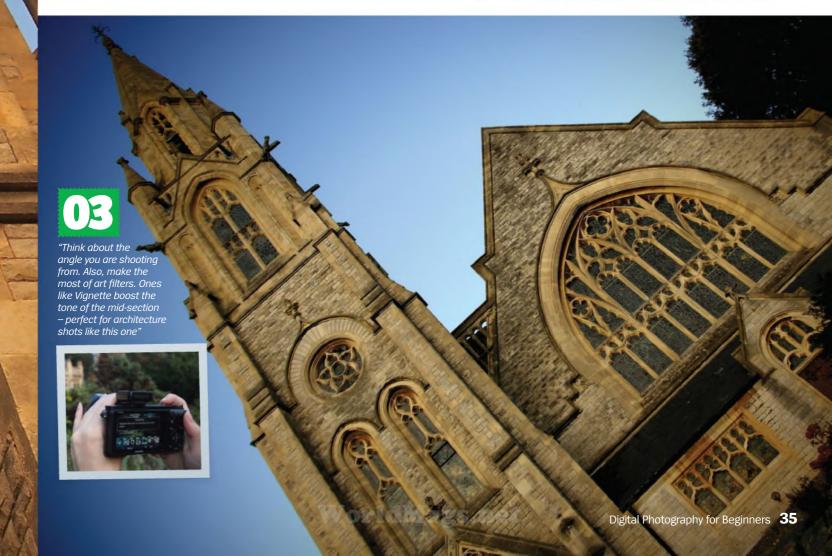
Try this with members of your camera club or family and friends and then review them and see which work, and which don't. You can learn lots from the mistakes you make and the triumphs of others.

Experiment with angles, try 'zooming with your feet' and changing your perspective, or think about composition alternatives like panoramas.



"Look for the details like door handles when shooting older buildings, as the textures of wood and metal work nicely. These can often make for stunning abstracts"





Digital Cămera Guide



Get to know your camera and you'll soon be taking your best ever photos

Deciding which camera to buy can be rather tricky. There are different camera types, manufacturers, features and prices to consider, but we believe it's not just about the camera, it's about knowing how to use it.

Each type of camera has its own set of pros and cons, and which one you choose will be dependent on what you're using the camera for and your past experience in photography. If you simply want to catch quick shots on holiday or take videos of a grandchild, then a compact or cameraphone will probably suit your needs. But people looking for large printouts and more advanced shooting options will need to look towards DSLRs.

No matter what type you choose, with this Quick Start guide you'll get to know all the key aspects of your camera and you'll soon be taking amazing shots.

Symbols explained



Delete - found on all cameras



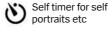




Night time/ low-light scenes















Exposure compensation



features Macro - for



close-ups Sports - for



fast action Landscapes - for



wide angles Portrait - perfect for people



Manual mode - for control

---Jargon buster

Aperture

Affects the amount of your image that is in focus – the 'denth of field'

Shutter speed

Fast speeds freeze action while longer ones blur motion

Refers to how sensitive the sensor is to light and makes low-light photos clearer

White Balance

Affected by the ambient light around you, your camera can alter this setting to ensure a

Exposure

detail in light and dark areas

Metering

Refers to the way the camera reads the light in the scene

Focal lengths

Wide-angle – a wider angle or view than normal, eg 28mm; Telephoto – a magnified view of distant subjects, eg 200mm

The screen on the rear of the camera

Megapixels

Number of pixels on the sensor, in millions

Viewfinder

Optical – shows you the view through the camera lens and is good for accurate framing; Electronic - shows the view on an LCD in the viewfinder

DSLR

This stands for digital single lens reflex camera

CSC

"We believe that it's not just about the camera, it's about knowing how to use it"







Camera types

Cameraphones

Pros...

- ✓ Light and compact
- ✓ Cool app add-ons ✓ Instantly share
- Cons...
- X Small lens and sensor
- X Flattens perspective
- X Less features



Your cameraphone can shoot, edit and share images instantly

Fixed lens

Pros...

- ✓ Easy to use
- ✓ Light and versatile
- ✓ Lots of features

Cons...

- X Fewer manual options
- X Can be slow
- X Less adaptable

Fixed leus camera are easier to use and cheaper





Interchangeable lens

Pros...

- ✔ Great image quality
- ✓ Fast shooting speed
- ✓ Manual and Auto

Cons...

- X Can be expensive
- X Can be complex
- X Can be heavy

DSLRs and CSCs are more expensive but have better



Iuterchaugeable leuses do offer more creativity, but at a cost

Accessories













08





Memory card Check what type your camera accepts before you buy

for multiple slots

Bag 3 Bag Protect your camera, card and any accessories with a camera bag

04Editing software Your camera usually comes with its own free editing program on a disc in the box

Lens cloth Keep your camera clean. You could try an old glasses cloth

Support A beanbag will keep shots steady while you decide on a tripod

Batteries Spare batteries are a must have

OS Connection Check you have all the leads you need to connect your camera

Modes













Auto Your camera makes all the decisions for you in this mode

Scene 2 You select the type of scene, the camera does the rest

Program 3 Program
You have control over aspects like white balance, flash or ISO

Aperture
Priority You control the aperture, but your camera controls all of the other settings for you

Shutter Priority You control the Shutter speed, but your camera controls the other settings

Manual
You decide on all of the camera settings; the camera doesn't choose any

TOP T If you're shooting with a compact camera that doesn't have a mode dial on it, you should be

in the Menu system



p48
Understand how Program mode can benefit you

Take more creative control of your camera by getting to know how it works

Your settings Learn all about your camera

Scene modes Tips on the various scene modes

Program Take more control over settings

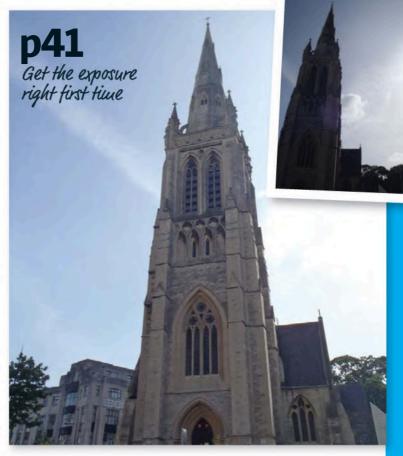
Aperture Aperture Priority mode explained

6 Shutter speed
Use Shutter Priority for great effects

White balance We break these settings down











Settings explained

We take you through what your camera's settings can do, and how you can tweak Auto mode for better results

All digital cameras come equipped with an automatic shooting mode that's designed to do all of the work for you, so you can simply concentrate on what is being shot. Auto often utilises the camera's best settings in all situations, but these don't always yield the best results.

We will be showing you each of the functions Auto mode carries out behind the scenes, how these functions change the outcome of your photos and how slight manual adjustments can help you get the most out of your camera.

ISO settings

The ISO is the camera's sensitivity to light. The larger the ISO, the more sensitive the camera's sensor is. If the ISO is low, the shots will be clear but darker. Images will be brighter with a high ISO, but will appear grainy.

Technical tip

ISO changes how sensitive a sensor is to light. Higher ISOs gather more light and are better for low-light scenes

What the camera chose

This shot, taken on an ISO setting of 400, is a little grainy, but has retained the low-light colours of sunset making it a warm shot. The camera chose a relatively high ISO as there was little ambient light

The settings we chose

We decided to drop the ISO setting to 80 in order to get rid of some of the grain and noise. Although the image is still nice, it is a little darker and the warm colours of sunset have been lost



"Getting the exposure right for the end photo can often require one or two attempts"

The settings we chose

While the camera chose to meter one point only, we chose to use multi-point metering to meter the sky and church and achieve better exposure

Metering

The camera automatically measures light intensity using different parts of the scene, and then finds the best settings for the image exposure. Getting the exposure right for the end photo can often require one or two attempts.



Aperture

The aperture controls how wide the lens is open, and ultimately the depth of field. A large aperture (a low f-number, eg f2.8) will let in more light and give a main point of focus with a blurred background.

The settings we chose

By using a low f-number, the main subject is in focus and the rest of the photo is blurred, putting emphasis on the flower



What the camera chose

Leaving the camera on Automatic mode has given us a large depth of field. This means that most of the photo is in focus



If there's not enough light, the camera will fire its built-in flash to illuminate the subject at the time of taking the photo. The flash symbol may appear to inform the user that it's going to be used.

The settings we chose

By turning the camera's in-built flash on we have filled in the shadows on the faces, caused by the sun being behind them



What the camera chose

Because this was a bright day the camera's flash has not gone off. However, the sun was behind our subjects so their faces are in shadow







What the camera chose

This automatic white balance has made the sky appear too bright, losing the detail in the clouds

White balance

White balance is designed to ensure white objects appear white in the photo, and other objects are free of colour casting. Most digital cameras come with a variety of white balance settings, each tailored to shooting conditions.



What the camera chose

Using Auto, the camera isn't aware the subject is moving, and therefore uses a normal shutter speed, making the subject blurred

Shutter speed

The shutter speed determines how long the lens is open for, and therefore how long the picture is taken for. A faster shutter speed is useful for shooting fast-moving subjects (cars, people playing sport) while a slower shutter speed is best for being creative with long exposures.

Blurred/Out of focus

Because we have focused on the person and used a shallow depth of field, the background is blurred

3 common... Focusing problems solved

Wrong focus point

Focus

Digital cameras have the ability to automatically focus on the subject, and many now come with different focusing abilities that are suited to different subjects or situations

Technical tip

Every manufacturer calls its focus modes by slightly different names, but the icons will usually be similar.

Sharp/In focus

Make sure you focus on the right subject to ensure crisp details where it is most important to the photo

Types of focus Commonly used focus settings on your camera



Face priority autofocus If you're shooting people then opt for face priority or face recognition, which most new cameras offer. You'll usually see a little square appear around the faces that the camera is focusing on – some cameras recognise multiple faces at any one time.



Tracking or continuous If you have a moving subject then opt for tracking or continuous mode. It will lock onto the subject and move with it. Keep the active subject in focus. This will be easier than trying to learn how to pan to keep focus on a moving subject.



Single, spot and multi Single or spot modes ensure that the centre of the image is in focus, while multi-area will focus on a number of points. Spot is generally more accurate. If you don't want the subject in the centre of your shot, half-press the shutter to focus, then reframe.

Scene modes

We take you through each of the scene modes you're likely to find on your camera and give tips on how best to use them

Modern digital cameras, from compacts right up to DSLRs, are very user-friendly. With many cameras, there is a focus on preset camera settings which help users of all levels get the most out of their camera in any given situation. These presets are called the camera's scene modes, and they are becoming more diverse with new cameras.

Setting your camera to a new mode when out and about can be cumbersome, and often cause you to lose the shot. However, we will be showing you the advantages of taking the extra time to set up your camera to the correct scene mode.

Landscape **A**

Landscape mode will set the camera up for capturing large and detailed scenes. Using a small aperture (large f-number) ensures as much of the scene is in focus as possible. To compensate for this, a slower shutter speed will be used, meaning a tripod may be required to keep the camera steady.

Automatic mode

Landscape scene modes

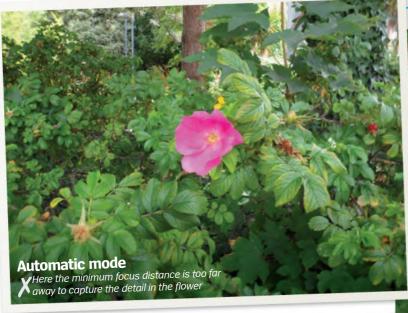
Landscape scene modes

In Auto the sky and the land are exposed, but they're a little bland

enhance the blues and greens

ं ब्वें Technical tip

with filters? Try using a polarising filter, which will darken the blues and greens.



Macro X

Macro shooting modes will usually change the minimum focusing distance of your camera, allowing you to get up close and personal with your chosen subject. This mode will also widen the aperture (lower f-number), putting the main subject in focus while blurring the background.

Macro scene mode

With a closer focusing distance we were able to get some great detail from the individual flower



"Macro shooting modes allow you to get up close and personal with your chosen subject"

Portrait 3

Portrait mode is great for shots of a single person. Much like macro mode, it selects a large aperture (low f-number) to put the person in focus with the background blurred. This draws all attention to the person.

Portrait scene mode

This mode selected a longer exposure instead of using flash and created a more flattering shot



Automatic mode

The Automatic mode has prompted the flash to fire, resulting in an overexposed shot with flat skin tones



Sport/Action 🞕

Sport/Action mode is for taking photos of moving subjects. It increases the shutter speed, attempting to freeze the subject in place when you take the photo. This mode works great in bright light.

Sport scene mode

On the sports scene mode, the camera uses a higher ISO and shutter speed to freeze the motion

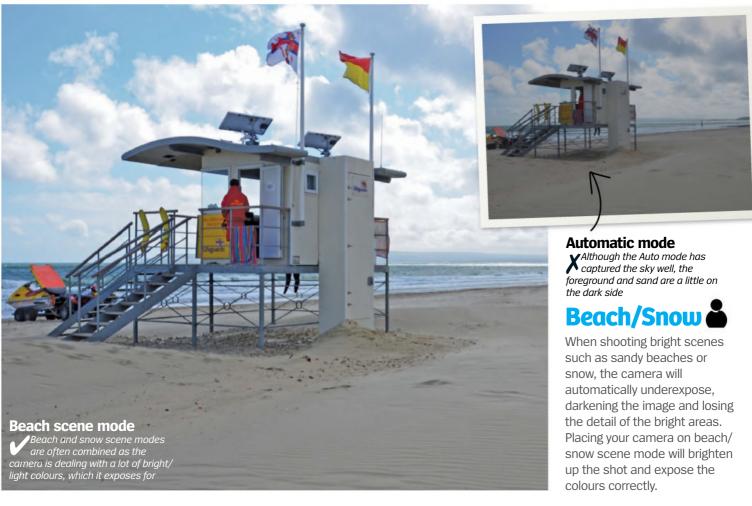


Automatic mode

On Automatic, our camera hasn't recognised the fast-moving subject so hasn't upped the shutter speed







High dynamic range

High dynamic range photography is a technique of taking a number of exposures which cover the dynamic range of the scene. This means you are able to capture both the highlights and lowlights of a scene, giving the photo a better tonal range. When processed, HDR photos can look very striking and bring out detail which may not normally be visible.

Technical tip

You can shoot three or more images and combine them to create an HDR, or simply use an in-camera filter.

HDR mode

Shooting using an HDR mode usually takes three exposures, one normal, one under-, and one overexposed



Normal exposure *Trying to expose for both the sky and the foreground has left this image* with no detail in the sky

3 alternative... Scene modes

Museum

Automatic mode

By merging the photos together, either in camera or using editing software, the final image should turn out like this



Underexposed

In this shot the foreground is too dark, but the sky is a nice representation of

WorldMags.net



Overexposed

There's still some great detail in the brickwork, but the sky is completely blown out

Program

Program mode can be found on some compacts, CSCs and DSLRs – so it's one feature everyone should get to grips with

Program mode can be found on almost all modern cameras. It's signifie by a small P in either the shooting mode menu or on the mode dial. In this mode, your camera still chooses the shutter speed and aperture for the scene in front of it, but it enables you to take control of aspects like balance, focus modes, ISO settings and flash modes. By controlling these features you can get more creative with your images and ensure that you produce better-looking photos than ever before.

Chosen mode

meant a slower shutter
— speed was set by the
camera, resulting in the
lovely blurred water here

🗑 Technical tip

If you have to up the ISO, try converting it post-shoot to black and white, as grain

"The higher the ISO number, the more light the camera can gather, which is great for low-light scenes"

WorldMags.net

ISO

The ISO setting refers to how sensitive the camera sensor is to light. The higher the number (eg ISO 800 and above), the more light the camera can gather, which is great for low-light scenes where you're unable to use a flash. Your camera will try to opt for low numbers to keep the photo noise free (higher ISOs do suffer from noise or grain), but sometimes upping the ISO is the only answer.

White balance

When left on Auto, your camera's white balance will choose the setting it feels is most appropriate, like cloudy, incandescent or tungsten. However, the camera can't always choose for mixed lighting or for situations like sunsets and sunrises, which will cause washed-out colours that don't represent real life. By setting the right white balance you can also add 'creative' colour casts, which could add a new dimension to your shot.

Automatic mode

The camera has selected a warm white balance, probably due to it being quite cloudy



Chosen mode

● We chose 'Daylight' instead, which produced more neutral tones that were closer to real life



Focus

On most system cameras, you can select the Focus mode while shooting on Program. This can benefit you in a number of ways. Manual focus can be a great option for macro shots and those with poor light. Continuous autofocus or tracking focus can be great if you know your subject will be moving. Your camera will not be able to anticipate these aspects so may choose the wrong focus and cause you to miss the shot.

Automatic mode

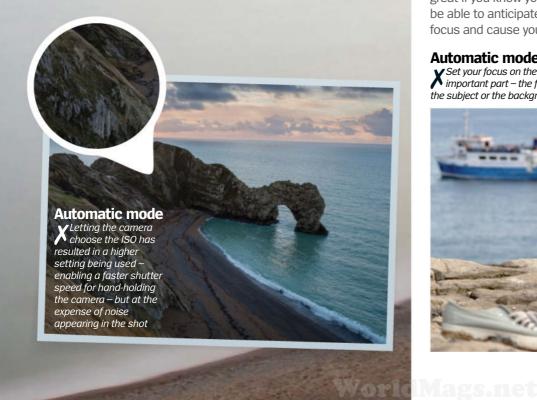
Set your focus on the most important part – the foreground, the subject or the background



Chosen mode

●You can half-press the shutter release to focus and then recompose your image







Automatic mode

When shooting in bright conditions, your camera's Auto mode can easily over or underexpose a scene

Exposure Compensation

Exposure Compensation is represented by a plus and minus symbol, and often has a button for access. By pressing this button you can rotate the control wheel or use the d-pad to move up or down a scale. To correct for overexposure (image too bright) use a negative number; to correct for underexposure (image too dark) use a positive one.





Automatic mode

Your camera will automatically shoot single frames which can mean you miss the action

Drive mode

Some cameras enable photographers to alter the Drive mode when in Program mode – this is great for action lovers in particular. In Single Shot mode the camera will fire just one shot, which is typical when on Automatic. If you select Continuous Drive mode instead, the camera will fire a rapid succession of shots. Self-timer is usually available here too.





Chosen mode By using a flash to 'fill' in' the light – a fill flash – the end result is much more pleasing Technical tip You can alter the flash's strength, or you can bounce it or diffuse it by putting some masking tape over it.

Flash

Flash can be very useful and yet very underused. Depending on the situation you may want to turn it off completely, use red-eye reduction mode or opt for something more creative like rear curtain or slow sync. All of these terms can be very confusing, though, so most of us just leave the flash to the camera to manage. However, photos can be vastly improved by taking control of the flash settings. Here we're talking about in-camera flash and not a flash that is connected to the camera via the hotshoe, for instance.

"Your photos could be vastly improved by taking control of the flash settings"

3 alternative... Flash modes



Slow sync When using Slow Sync. your camera will use both a flash and a longer shutter speed, which can be great for creative novement effects, like capturing a sharp photo of your subject and blurred background.



Rear curtain Rear and front curtain refer to when your camera will fire the flash during the shot. With rear curtain it fires at the end of the exposure, but with front curtain it fires at the start of the capture.



Fill in Great for backlit subjects, fill in flash refers to the 'filling in' of dark areas. For instance, if you're shooting inside a church against a window, the background will be be in the dark.

Aperture

Take control of your aperture and start creating some stunning artistic shots in camera

The idea of apertures and f-numbers are enough to leave many confused, but the general outline is that smaller f-numbers create a wide aperture and larger f-numbers result in a small aperture. But what does all this really mean?

In brief, your aperture works like the iris of an eye: the wider the aperture the more light can pass through the lens, and vice versa when referring to a small aperture. F-numbers simply break this down and represent different opening stages as stops. Depending on the lens you're using you can work with apertures as wide as f1.8 or as small as f32.

It's aperture that creates the artistic blurry background you see in many professional shots, otherwise known as depth of field. A wide aperture, generally anything below f8, will create a shallow depth of field effect, making the subject you are focused on the main point in the frame by softly blurring out any background distractions. A smaller aperture (above f8), however, creates a larger depth of field, enabling you to bring more objects into focus from both the foreground and background.

Follow along as we're going to show you the benefits of using your camera's Aperture Priority mode in order to creatively control this professional-looking effect. Take a look at our aperture suggestions for specific photographic genres and then simply set the f-number that you want to work with. Your camera will then select the right shutter speed for you, ensuring professional, even exposures every time.

"A wide aperture will create a shallow depth of field effect, making the subject you're focused on the main point in the frame"







Bring wore of the shot into focus by using a larger f-number



Aperture is affected by how wuch light is let into the leus. It can be wade bigger or swaller by changing the settings on your camera



F11

Not unsuitable; however, the small aperture makes the image appear more 'snapshot' than professional

Portraits

Create picture-perfect and professional-looking portraits by using a wide aperture setting. The artistic shallow depth of field effect will draw you into the frame and bring focus to the model's eyes and features. A smaller aperture, however, is great for shooting group shot portraits, as it will help to ensure everyone remains in focus.



F5.6

The blur effect is distracting and restricts the view, making wide apertures unsuitable for landscapes

Landscapes

Landscape photographs are best when they're sharp and perfectly in focus. A small aperture setting is ideal for this genre, as it will ensure most of the frame is in focus from the foreground to the background. Remember to use a tripod where possible, as the slower shutter speeds when working with a smaller aperture will result in motion capture.



F22

Not ideal for fast-moving subjects like wildlife and pets – a smaller aperture will require a longer shutter speed

Wildlife and pets

A wide aperture works well when photographing pet portraits or wildlife. The Aperture Priority mode will prevent your image from becoming overexposed by extending the shutter speed, which is also great for freezing fast-moving or fidgety subjects. Like a human portrait you should always ensure your subject's eyes are in focus.



F25

The in-focus background creates an unwanted distraction from our macro subject

Macro

You can capture beautiful macro shots with wide apertures. They're ideal for location lighting, and will result in well-exposed images. The faster shutter speed will also freeze any motion from the breeze or camera shake when shooting up close. The out-of-focus background also adds depth and makes your subject the focus of the frame.



F11

A smaller aperture will bring all of your subject(s) sharply into focus, but the results may not be as interesting

Still life

Still-life objects can be found around the home and are great for practising your photography techniques on. Why not try photographing more than one object to best see how aperture control works. For the most artistic results you should use a wide aperture and focus your camera on just one of the objects within the composition.



F8

A smaller aperture adds drama but can make an action-themed image look a little static and uneventful

Sports

Fast-paced sports don't always require quick shutter speeds to get more artistic actionpacked shots - just practise your panning technique. Use a large f-number for a small aperture in Aperture Priority mode; the camera will compensate for the exposure by slowing down the shutter speed, enabling you to capture motion blur and speed.



Shutter speed

Select the Shutter Priority mode on your camera and take control of your creativity

Shutter speed controls how much light is let through the lens. The speed is measured in seconds and fractions of a second, with most cameras enabling you to shoot as slow as 30sec and as fast as 1/4000sec. Depending on how fast or slow the setting, you can then control how under-, over- or well-exposed your image is.

As a rule you should avoid shooting at speeds slower than 1/60sec unless using a tripod, as the shutter is also responsible for capturing movement. Camera shake and motion blur have ruined many a good photo; however, you shouldn't always overlook capturing movement in a still image. Depending on the genre you're shooting, movement can add an element of energy into an otherwise static shot. By using the right shooting techniques (such as panning

and light painting) and manipulating your shutter speed, you can get some great, creative results in camera.

Freezing motion is another matter, and it's not always as easy as setting a faster speed - the lens you shoot with can also play a big part. When setting your shutter speed, pay attention to the focal length of your lens. Your shutter speed should always be faster than the focal length. If, for example, you're shooting with a 55-80mm lens then set your shutter speed upwards of 1/125sec to prevent any motion from being captured.

Take a look at our examples over the next few pages and switch your mode dial to the Shutter Priority setting. Your camera will determine the correct aperture for the exposure, so you're free to experiment and explore how your shutter works.



Shots like this are captured using slow shutter speeds

"By using the right shooting techniques and manipulating your shutter speed you can get some great, creative results in camera"



Capturing a carouse See what a change in shutter speed can do



One third of a second

This image is overexposed because the shutter's open for an extended amount of time. Hardly any details are visible on the carousel due to the speed of the movement and slow shutter.



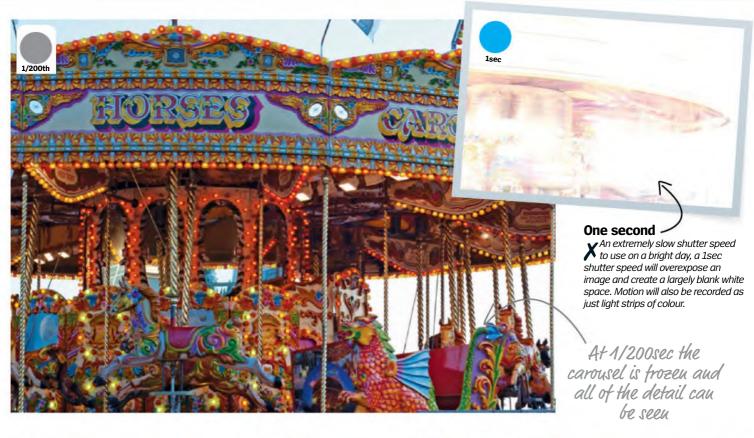
One tenth of a second

X Stationary details are beginning to show through with only the moving horses remaining blurred. A tripod is necessary when using a shutter speed as slow as this



One fifteenth of a second

There is not a huge amount of difference in this shot to the last bound shot to the last; however, the shapes of the horses are becoming more defined and the slow shutter speed does give the image a more creative edge.





One twenty-fifth of a second

The horses and details of colour are becoming more apparent at this shutter speed. The horses at the front of the carousel are beginning to get more shape than before.



One fortieth of a second

This image appears much better in terms of the overall exposure as the whites aren't completely blown out as before. It still requires a tripod to shoot successfully, but motion blur has eased considerably.



One sixtieth of a second

1/60sec is ideal for shooting most subjects handheld, but even faster shutter speeds are required to avoid the inevitable motion blur when photographing fast-moving subjects like the carousel.



One eightieth of a second

This image is a lot sharper than previous shots, but motion blur is still present up close. We will need to increase the shutter speed further to freeze the movement successfully.



1/125 second

A great shutter speed to use on bright days. The exposure in this image is well balanced. The horses and sign appear clear, although slight motion blur can still be detected around the edges.



1/160 second

1/160sec will enable you to freeze all the action, even when shooting handheld. If you're working in Shutter Priority mode, the camera will set the correct aperture to ensure you get an evenly exposed image.

1/5sec

Slower speeds will record camera shake. The slightest movement will blur what could have been a great shot

Portraits

You will ensure that your portraits are sharp and picture-perfect by avoiding camera shake and motion blur. Work in Shutter Priority and increase your shutter speed setting - your camera will compensate for the exposure by opening up the aperture, creating a beautiful shallow depth of field effect that is perfect for portraiture.



1/250sec

Faster shutter speeds can create snapshot-style images that are a lot less interesting and engaging

Landscapes

Slower speeds are ideal for landscapes, as they enable you to close down the aperture and get an evenly focused, much sharper shot. The longer the shutter is open, the more dramatic the results - perfect for capturing moody sunsets in low light. Try shooting a seascape with an extended shutter speed and see how you can capture water as mist.



1/20sec

When shooting with a large focal length lens, increase your camera's shutter speed to avoid getting camera shake

Wildlife and pets

Fast-moving pets and wildlife can be tricky to capture without motion blur, but faster shutter speeds are ideal for getting great shots. Be sure to increase your shutter speed to freeze your subjects while they are on the go, but always remember that the faster the shutter speed the wider the aperture, so there will be less available focus area.



1/10sec

Slower shutter speeds record movement and aren't ideal when shooting macro images outside in a breeze

Macro

When taking macro photographs in Shutter Priority mode, you should avoid using shutter speeds slower than 1/60sec handheld. The longer the shutter stays open the more likely it is that you will record movement and camera shake, which will prevent your macro shot from looking professional, sharp and in focus.



1/125sec

This image is not unsuitable, but when working in Shutter Priority mode you can experiment and avoid playing it safe

Still life

Experiment with your camera's shutter speed settings when shooting still life in a controlled lighting environment like a studio. Faster shutter speeds are great for getting a professional, shallow depth of field effect, but you can try slowing down your shutter speed and experimenting with the light source for some really creative results.



1/1250sec

A faster shutter speed will freeze movement and result in detailed but static shots like this one

Sports

Avoid making energy-packed shots look static by extending your shutter speed to record motion. Panning's a great technique for sport, as it enables you to keep subjects sharp while the background blurs out. It's important to remember that, when using this technique, your camera's autofocus is set to continuous so it can keep up!



White balance

Understand how white balance settings can affect your captures

Before you make white balance alterations in camera it's important to know how white balance can be affected by the light source you're shooting within.

All light has a colour temperature, which can range from warm orange and red tones (tungsten bulbs) to cool blue and green tones (fluorescent bulbs). Without the right white balance setting these lights will create a colour cast in the photo. The white areas will have a noticeable blue or orange tone.

To overcome this, most cameras have an auto white balance setting to compensate for the casts and neutralise the image so it's a more accurate representation of the scene. However, it isn't perfect and sometimes the camera will struggle to remove all traces of a cast. This is where your manual white balance settings become useful. Simply match the white balance settings to suit your light source.

You can also get creative and apply the opposite white balance setting to the light source. This will create a controlled colour cast that adds an edge to your image. Most photographers use this to warm up an otherwise cold scene or to enhance a mood or feeling that the photograph portrays.

"Auto white balance isn't perfect – the camera can struggle to remove all of a cast"

Does my camera do it?



What's good about it...

Offers custom white balance settings for more advanced users and most have in-built colour correction

What could be better...

With so many other settings to adjust, a DSLR



Compact camera

What's good about it...

Compacts have pretty accurate auto white

What could be better...

White balance often has to be changed within the



Compact system camera

What's good about it... Most have a button on the body for quick access to white balance setting

What could be better...

setting won't be as accurate as a pro DSLR's

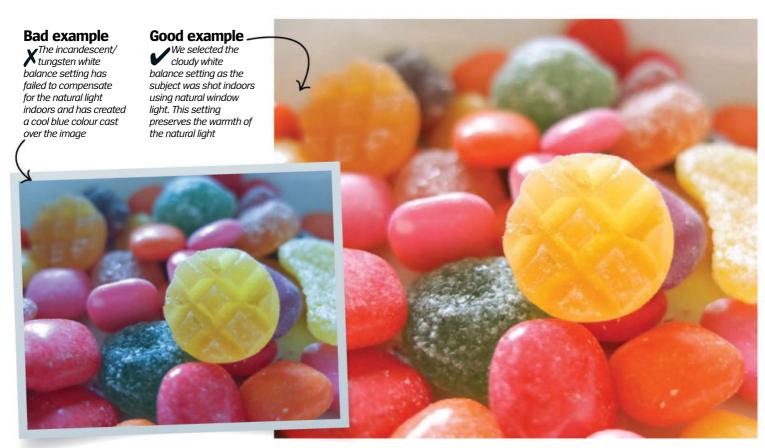


Cameraphone

What's good about it... Smartphones have plenty of editing app options to choose from and download

What could be better...

Most don't come with optional settings so you



White balance modes Learn what the different white balance settings do



Auto

Auto white balance allows the camera to determine the best setting for the shot based on the lighting conditions. Most cameras will have a reliable and accurate automatic white balance setting that is suitable for changing light conditions.



Daylight/Sunshine

The Daylight/Sunshine white balance setting is, rather unsurprisingly, perfect for shooting on bright and sunny days. This setting is relatively neutral and ensures your daytime scene is recorded without any unwanted colour casts.



Flash

When you're shooting with your studio or on-camera flash, you can create a cool cast on your images. However, by switching your white balance setting over to Flash, the camera will compensate and warm up the shots.



Tungsten/ Incandescent

Tungsten or incandescent light produced by a warm light bulb can create an orange cast like this. By selecting the tungsten/ incandescent white balance setting the camera will cool down the effect.



Cloudy/Shade

Overcast cloudy days often appear dull and cool in photographs, but the Cloudy setting helps to warm up the scene. This also makes it ideal for shooting low-light scenes like sunrise and sunset as it brings out the warmth in the sky.



Custom

Although it's a more advanced white balance setting, most cameras will offer a custom mode that enables you to make specific adjustments to your white balance settings, whether you want to cancel out casts or add them in creatively.



Fluorescent

Fluorescent lights that are often used in public places create a cooler blue-toned colour cast. To counteract the effect you should use the Fluorescent white balance setting so that your camera can compensate by warming up the scene.

What the icons mean



Auto is a default setting that enables the camera to determine the best white balance setting for the scene.



Tungsten/Incandescent -

Represented by a light bulb, the tungsten/ incandescent setting is ideal for shooting indoors under warm bulb lighting.



Fluorescent

This setting is perfect for shooting public places where Fluorescent lights are used, like cafes, gyms and subways.



Daylight/Sunshine

This symbol represents an ideal setting for summer's day shooting, ensuring you won't capture any colour casts.



Cloudy/Shade

Perfect for shooting on a cloudy day. This setting is also great in low light, like when shooting sunrise or sunset.



If you are using flash in the studio or working with your on-camera flash, use this to keep shot results warm.



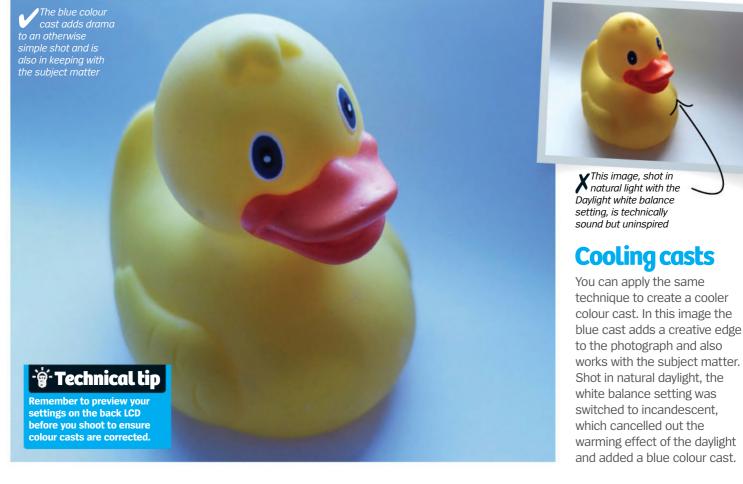
Ideal for removing more complex colour casts, you can also experiment with custom settings to add creative casts.

Jargon buster

Colour temperature of light

The colour temperature refers to how warm or cool an image appears. Lights that produce colour temperatures over 5,000 Kelvin create a cool blue cast; lower colour temperature lights create warmer orange casts







Common problems solved...

When to use custom white balance

After mastering shutter speed and aperture settings you will want to start exploring ISO and white balance. If you already change the white balance according to where you're shooting, you may now want to understand the custom white balance setting a little better.

White balance moves from cool to warm and is displayed in Kelvin (K), but you need to know how and when to use it. Your camera's custom white balance setting is ideal for correcting colour casts in tricky

lighting situations or when the camera's other white balance settings are not quite right. The Kelvin values represent the colour temperature of the light, with higher numbers reflecting cooler light sources and lower numbers representing warmer lights. Select the right number to cancel out or create a colour cast, depending on where you are shooting.

Check out our quick reference guide below to see what value Kelvin you would need for certain lighting situations.

Colour Temperature/Kelvin	Light Source
1000-2000K	Candlelight/Flames
2500-4000K	Tungsten/Ambient
4000-5000K	Fluorescent
5000-5500K	Flash
5000-6500K	Sunshine/Daylight
6500-8000K	Slight overcast skies
9000-10000K	Cloudy/Shade/Sunrise/Sunset

Editing fix: Correcting a colour cast in Photoshop





Correcting the cast

Open the image you want to correct in Photoshop. Go to Levels (Image > Adjustments > Levels). Zoom into your photograph and locate the brightest highlight area within the image. Use the Set White Point eyedropper tool to select what should be the brightest part of the photo.



Bringing back the detail
You will now need to select the 'set black point' evedropper tool and click on the darkest area of the image. Zoom in to ensure you select the right area and use the Preview button to check that



Finishing touches

You can now use the Set Gray Point eyedropp and select the grey areas of the image. Alternatively you can use the midtone slider along the bottom of the histogram to tweak the Finally, save your corrected photograph.

Shooting Skills

Tips and hints on taking perfect photos of any subject matter

66 **Composition** Learn the rules of framing

Fine-tune focusing Make your subject sharper with these tips

Take great action **78** Capture subjects in action

Master 86

astrophotography Aim for the stars

Capture perfect sunsets Shooting the golden hour

102 Perfect portraits
Essential skills for shooting flattering portraits

Landscape composition Improve your scenic shots

Black and white vistas Striking monochrome

Light trails Recreate this stunning lowlight shot with light trails















Composition

Learn how to compose stunning images in camera with our examples

A good composition is key to any great photograph. Your composition should draw in the viewer's gaze - it should be engaging yet easy on the eye.

Composing what is essentially a restricted view on a real-life scene is not always easy, but knowing some of the rules can simplify shooting. Understanding how to balance a composition is important, and knowing where to place your point of interest is essential to a successful outcome.

Over the next few pages we're going to take you through some of the oldest composition rules that were developed by master painters of the past. You can apply the same techniques to your photographs while shooting in any genre. Learn how to shoot using some of the essentials as a guide, including the rule of thirds, lead-in lines and the golden spiral. We'll also show you three of the best ways to improve incorrect compositions in Photoshop.

The following rules can be applied to all shooting scenarios and work with any camera type. Take a look at our inspiring image examples, follow the rules and start composing some great captures in camera for yourself.

"The following rules can be applied to all scenarios and work with any camera type"

Does my camera do it?



DSLR What's good about it...

Option to use both a viewfinder and LCD screen to compose, with an added grid feature for the rule of thirds

What could be better...

X Expensive, and you may not always have it on hand for



Compact camera What's good about it...

You can crop your compositions in camera

using basic editing features What could be better...

No viewfinder and a relatively small LCD screen make it harder to compose



Compact systėm camera What's good about it...

Great-quality LCDs with some able to tilt/rotate for shooting at awkward angles

What could be better

With a smaller sensor than a DSLR model, images won't be as high in quality



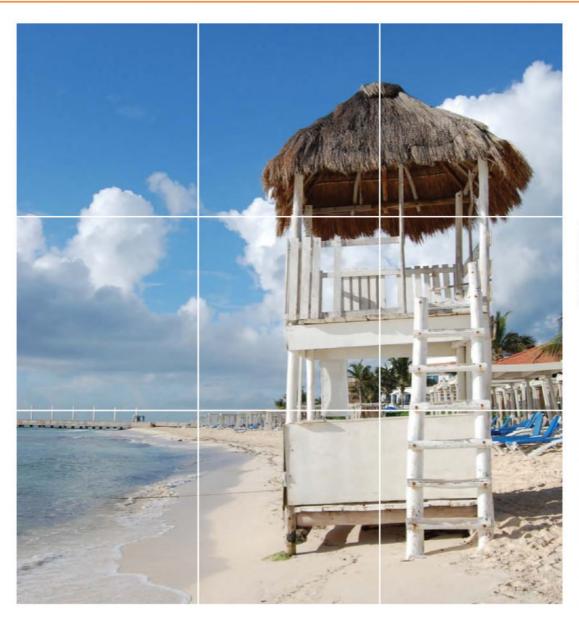
Cameraphone What's good about it...

Offers downloadable image-editing apps for

What could be better...

Produces low-quality images that won't look as sharp when printed





Rule of thirds

Use the rule of thirds to correctly line up your landscape scene and ensure you have a balanced composition. Try to place your main point of interest a third of the way up and preferably off-centre. Always remember to avoid shooting too much sky or foreground in a landscape.

Jargon buster

Rule of thirds

states an image should be divided into nine equal parts with vertical and horizontal lines. If you position your subject along the third lines you will create a balanced composition.

3 of the best...

Tips for great in-camera composition



Compose first

your hands to form a rectangle. Look through and pan around yourself for compositions.



Grid guidance

Activate the available grid in your camera's viewfinder or back LCD screen. Use the lines as a guide to follow the rule of thirds



Correction

Press Playback and zoom into your composition. This will enable you to determine if you have the best possible composition

How to use the rule of thirds Other ways to apply this compositional law

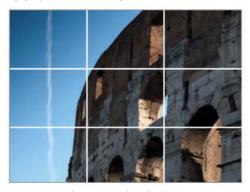


Top third You can apply the rule of thirds in a multitude of ways. In this image the point of interest rests on the top third of the frame in the composition. It works particularly well because the columns help draw your eye up

to the point of interest.

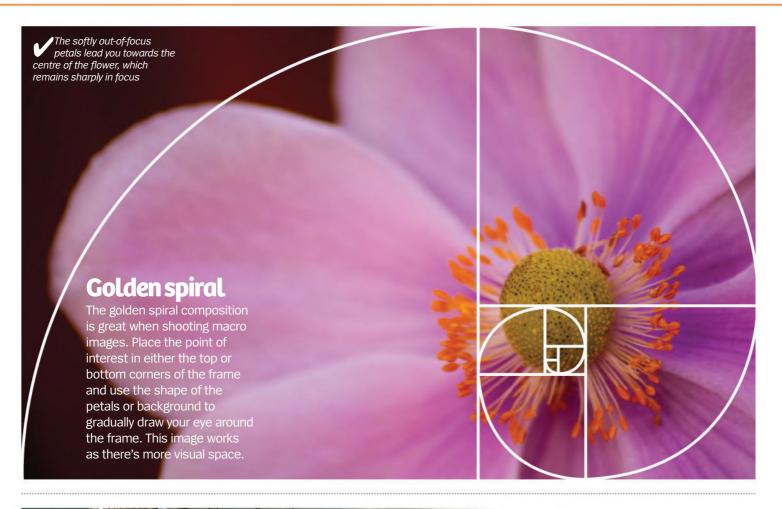


Portraits The rule of thirds works just as well when applied in portraiture. Position your model off-centre in either the left or right third of the frame. Use the background to lead your eye up to your subject and create a more interesting composition.

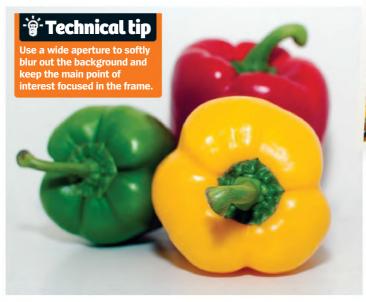


Balancing thirds The rule of thirds still applies to this image, which works because the subject fills the entire right third of the frame before falling onto the left third line. The aeroplane trail creates an added point of interest in the space and balances the shot.

Shooting skills









Rule of odds

In photography, odd numbers such as threes or fives work better than evens when composing an image. Odd numbers look more natural to the eye, creating a balance within the frame.





Colour

Consider carefully the colours you frame in your composition. Too many conflicting colours can often create a distraction from your focus area. Complementary or repetitive tones create great shots.

3 of the best... Ways to fix a composition in Photoshop



Grid

shop. Now select the grid via View > Show > Grid. Use the vertical and horizontal lines to make a more considered composition with the rule of thirds as a guide.



Select the Crop tool from the Tools menu and begin by selecting the entire image. Hold down the Shift key to maintain the correct proportions and slowly drag up on the corners of the frame. Move the selection area until you're happy.



Rotate

Before confirming your crop, hold the cursor in the top corner of the frame until the rotate icon appears selection until the horizon's straight, then click OK.

Cropping your images

Think about the angle and consider your crop

Getting the perfect composition is often a case of trial and error for photographers. Make sure you consider what the best angle on your subject is and think about what you want your final result to be. For instance, you can make buildings look large and imposing by shooting from a low angle, or create a dynamic portrait by shooting at an angle rather than straight on. The way you crop your image can also make all the difference to the success of a photo. Don't be afraid to extend your lens and zoom in closer. The well-known pattern of the zebra here means you needn't take such a literal shot of it; often a tighter crop can create a more interesting image. Play around and experiment to get the best image possible.



Shooting skills

The complete guide to FOCUSINS Keep photo subjects pin-sharp by mastering your camera's focus modes

Focusing is one of the most important photography skills to master, as it can mean the difference between a sharp shot you can be proud of and a fuzzy image that is destined to be deleted.

We've all had that heartbreaking experience of scrolling through our shots only to discover that one or several are out of focus. The bad news is that these shots are unsalvageable, as even the best editing programs cannot bring subjects back into

focus. The good news is that we're here to help you avoid the problem altogether.

Getting to grips with your camera's focusing modes will make sure that you never take a blurry image ever again. Of course, most cameras don't make it easy for you, with confusing names for settings and lots of complicated jargon to get your head around. Over the next few pages, we will break everything down into bite-sized chunks that are easy to understand, and

show you exactly when and how to use each focus mode. We will even show you tricks for focusing with any camera, from compacts to DSLRs, and help you find the right settings whether you own a Canon, Nikon or other make of camera. Then, if your shots are just a little soft and not completely blurry, our editing guide will show you how to rescue them. So no matter what you're shooting, let us show you how to keep everything pin-sharp for perfect photos.





Extra tricks for sharp shots Avoid blurry shots with these easy tips



Set the speed

Use Action scene mode or Shutter Priority and pick a fast shutter speed. This will freeze your subject in the frame for blur-free shots.



Use a tripod

Setting your camera up on a tripod or sturdy surface will help keep it steady and avoid any camera shake that can result in blurry shots.



Hold it steady

If you're shooting handheld, stand with your feet shoulder-width apart, hold the camera with both hands and tuck your elbows into your sides.



Delay the shutter

Even pressing the shutter button can jog your camera. Put it on a tripod and use self-timer or a remote release to take the shot without jogging it.



Keep stationary subjects sharp

Use face detection Keep portrait subjects in focus



When taking photos of people, you could use Selective Autofocus and focus on their face or eyes to keep them sharp. However, most cameras now feature a special mode to help you, known as Face Detection. It gets your camera to pick out any faces in front of the lens and automatically keeps them sharp and well exposed. This is particularly useful for shooting group portraits, when you have more than one face to focus on.

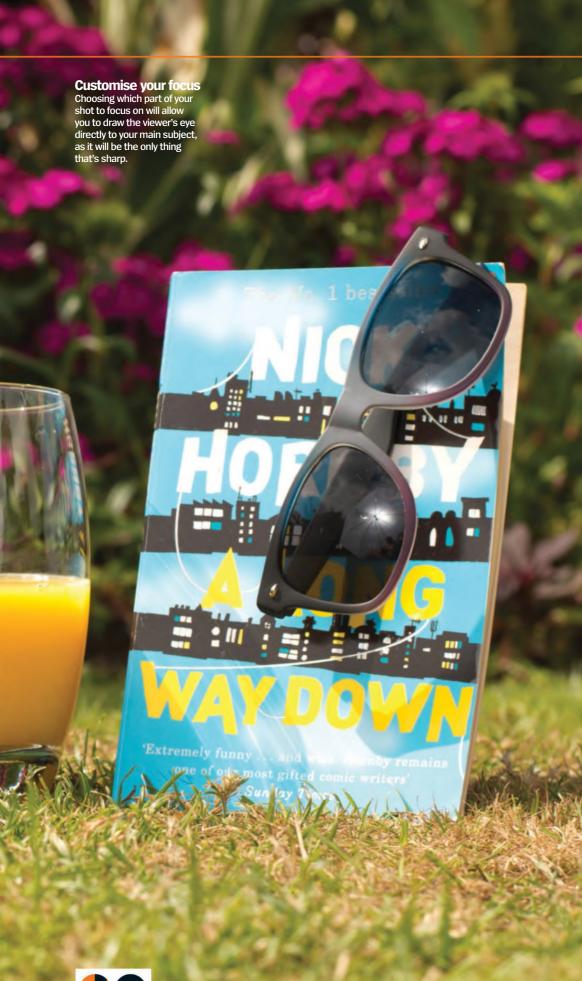
Capture perfect still-life portraits and more

When your subject isn't moving, it is very easy to focus on. The tricky part is keeping the right part of your shot in focus, as your camera may not know which bit you want to keep sharp. For example, if you are using a wide aperture this will create a shallow depth of field and blur some of your shot. To make sure it is just the background of the photo, and not your subject, that appears soft, you will need to tell your camera where you want to focus. You can do this by using Selective Autofocus or Single AF mode, also known as One Shot on Canon cameras and AF-S on Nikon.



Blur the background witching to Aperture Priority mode and using a small f-number (wide aperture) will blur everything in your shot except for the area you focus on







Choose an AF point ■ Some cameras let you choose where in the frame you want to focus. Bring up the AF points and select the one that is over your subject, or move the central AF point into position.



Focus in the centre Many compacts will only feature one AF point in the centre of the frame, as this is often the most reliable place to focus. However, if your subject is not central then there is a clever trick you can use to keep it sharp...



Lock and recompose To focus on a subject that is off-centre in the frame, point the camera at it and half-press the shutter to lock the focus. Then, with your finger holding the shutter in place, recompose the shot before fully pressing it to take the shot.

Focus on moving subjects Produce blur-free action shots

The hardest subjects to keep in focus are ones that are moving, which is why your action shots are the most likely to be fuzzy. Luckily, your camera has a handy focusing mode to help you keep them sharp. Continuous Autofocus mode, known to Canon users as Al Servo and Nikon users as AF-C, will detect your subject's movement and adjust the focus accordingly. Instead of locking the focus when you half-press the shutter, the camera will keep hunting around for your subject while you hold it in place. This is very useful for photographing children and animals, as you'll still have a good chance of getting a sharp shot despite their unpredictable and speedy movements.

Pick your settings

Use Action mode or switch to Shutter Priority and select a fast shutter speed. If your shots are too dark, set your exposure compensation to +1.



Set your focus mode

Select Continuous Autofocus. When you half-press the shutter, the camera will keep refocusing to keep subjects sharp. Fully press to take the shot.



Shoot a burst

Switch to Burst mode to capture a series of shots at once. Be aware that some cameras lock the focus for the first frame, so check your options.

Focus continuously

Mastering your camera's autofocus modes will help you keep fast-moving subjects in focus.









Pre-focus the shotKeep predictable moving subjects sharp

If you can predict the movements of the subject you are shooting, such as a car speeding along a road or a skier gliding down a slope, then you can use another method to keep them in focus. Just point your camera at the area that they are going to travel into,

and focus on the spot where your subject will be by either half-pressing the shutter or focusing manually. Then, when your subject moves into view, all you have to do is fully press the shutter to produce a sharp photograph with ease.



some CSCs have a handy feature called back-button focusing. This takes the job of focusing away from your shutter and gives it to a button on the back of your camera. This is labelled AF-ON on Canon cameras and AF-L on Nikon, but you must assign this function to the button via your menu first. If you press this button you can lock the focus on your subject and then recompose your shot in as many different ways as you like, with each one appearing sharp and in focus.

Take crisp close-ups

Focus manually to keep macro subjects sharp

When your subject is very close to the end of your lens, your camera's autofocus can often struggle to find it. In this instance, it is best to take control and focus manually if your camera will allow it. If you don't have a manual focus option available, then try stepping back until your autofocus can lock onto your subject. You can always crop into your shot later if you want more of a close-up.

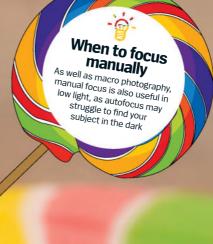
Be aware that your lens will have a minimum focusing distance, which you can usually find in the specifications section of the manual. If the distance between your lens and your subject is smaller than this value, then you won't be able to focus on it.

Go macro

For an extreme close-up, you will need a proper macro lens or another macro accessory, such as extension tubes or close-up filters.

> Focusing manually is easier than you might think, but of course it is not as quick as autofocus. Therefore, it is best to only use it when you have the time,

so avoid it when shooting fast-paced action. However, with a bit of practice you'll get quicker in no time, so follow our steps to master manual.



How to use manual focus

Take control with our step-by-step guide



Switch it on

You usually have to flick a switch on the side of your lens to M or MF, but on some cameras you have to find the focusing menu and pick it on screen.



Twist the lens

Twist the focus ring on your lens and look at the image on the LCD screen or through the viewfinder. When your subject appears sharp, stop twisting.



Use the focus scale

Work out the distance between your subject and the end of your lens and then twist the focus ring to find that distance on the focus scale



Check the results

It can be difficult to tell if your subject is in focus just by looking at it on the LCD screen. Make sure you zoom in to really check that it's sharp.



Set your mode

By switching to Macro mode, you can tell your camera that your subject is close to the end of your lens so it has a better chance of finding it.



Sharpen your shot Fix a soft photo in Elements



Adjust the sharpness

Go to Enhance>Unsharp Mask and drag your subject into the preview box. Now increase the Amount slider until you can clearly see all the details but it still looks natural.



Control the effect

The Radius and Threshold sliders control how many pixels in your image are sharpened. It is usually best to keep both these values low to produce natural results, but experiment with what works best for your shot.



Action shots

Discover how to capture sharp images of fast-moving subjects

Photography isn't just a fun hobby; it can also be useful for recording images of scenes we can't register with the naked eye, whether it's extreme close-ups of tiny details or a single split-second of action. When photographing fast-moving subjects, your camera is capable of freezing them in the frame to capture those blink-and-you'llmiss-it moments, such as a runner crossing the finish line or a drop of water suspended in the air. This also gives you the opportunity to produce some really striking images of memorable moments, from sporting events to your kids or pets playing in the park.

The main secret to great action photos is shutter speed. A fast shutter speed will freeze your subject in the frame, while a slow shutter speed will record motion blur. Don't

worry if your camera won't let you adjust your shutter speed though, not all cameras do. fortunately you can use scene modes to achieve the same effect instead.

Over the next few pages, we will show you how to freeze action for pin-sharp shots and take you through some inspiring projects you can try to test out your new skills, no matte what camera you own.



Pick the right shutter speed



Humans in actionTo capture a blur-free shot of a human subject in motion, you will need to use a shutter speed of 1/60sec or faster.



Animals on the move
A shutter speed of at least 1/250sec will be needed to freeze fast-moving animals in your action photos.



Water droplets
To record individual water droplets in mid-air
you will need to set your shutter speed to 1/500sec or faster.



Birds in flightFor sharp shots of birds in flight you will need to use a shutter speed of at least 1/2000sec in order to prevent blurred wings.

Keep your subject in focus

Discover how to produce pin-sharp images of people, animals and objects in motion

Making sure your photos are in focus is always quite tricky, but it is even more difficult when your subject is moving. Unfortunately, it's also impossible to fix an out-of-focus shot, so you need to make sure that you get it just right at the time

It really doesn't have to be that hard to take a sharp shot though, as all you need to do is master your camera's

> focusing modes. Once you know what you're

doing, you'll have no problem keeping the subject of your photo clear and detailed.

You can then have a go at some really creative techniques, such as panning. This involves keeping your subject in focus while also capturing motion blur in the background of your image. It looks quite complicated but is actually really easy to do. Here we explain how in just a few easy steps, and also show you an alternative method that's even simpler to master.

Fake the effect

You can easily fake a panning effect using editing software. To find out how, visit www. photoforbeginners.com and search 'How to fake a panning effect'

Master panning





Set your speed

O1 Set your camera to Shutter Priority mode and pick a speed of 1/60sec.



Support the camera Set your camera onto a monopod or a tripod with a panning head.



Select Manual Focus O2 Switch to MF and pre-focus on the spot the subject moves into.



Pan and shoot Fire the shutter and swivel years along with them when ready.



Control the light for a bright shot

Keep your subject perfectly lit in your photographs

Making sure that your action photography subject is well lit for your shots will allow you to capture all the sharp details and produce a really striking image. However, ensuring there is enough light can be a challenge, as using a fast shutter speed will not give your sensor much time to record a lot of light. This is why underexposed action shots are a common problem in photography, but there are some tricks that you can use to brighten your images. If you're not able to introduce more natural or artificial light into the scene, then you could raise your ISO value to increase your sensor's sensitivity to the light instead. Just be aware that raising your ISO too high could cause your shots to become grainy.

Another option is to use your camera's flash to illuminate your subject, as we explain here.



Understand sync speeds

Using flash with fast shutter speeds can sometimes cause a black bar to block part of your photo. This happens when you use a shutter speed that is too fast for your camera's flash, so part of the shutter curtain that opens and closes when you take a photo shows up in your shot. To avoid this, you will need to keep your shutter

speed slower than your camera's sync speed, which is typically around 1/250sec for most DSLRs. Some cameras and flash units have a high-speed sync flash function that causes the flash to continuously fire throughout your exposure so you can still use fast shutter speeds and capture the whole scene.





Capture a fruit splash





Set up the shot

O1 Set up your shot in a well-lit area, such as near a bright window, or use desk lamps to light the scene. You can also set up a colourful backdrop with a piece of coloured card.



Switch off the flash

As you will be using a very fast shutter speed, your flash might not be able to keep up. Either switch it off and use natural light instead or set it to a high-speed flash setting if you can.



Pick your settings

O3 Switch to Shutter Priority mode and pick a fast shutter speed of around 1/500sec to freeze the splash. You may also need to raise your ISO if your shots are too dark.



Focus and take the shot

O4 Set up your shot in a well-lit area, such as near a bright window, or use desk lamps to light the shot. You can also set up a colourful backdrop with a piece of coloured card.



Take a burst of images

When the action you're photographing is unexpected and fast, it can be easy to miss the perfect shot. Switching your camera to Burst or Continuous Shooting mode will cause it to take a series of photos in quick succession when you hold down the shutter. This will give you a selection of images to choose from, and chances are that one of them will capture the perfect split-second of action. Start shooting just before the action starts and carry on shooting for a few seconds after it has finished to increase your chances of capturing the perfect moment. Just make sure you have enough space on your memory card for all those images, or you could be disappointed.







Master the basics of astrophotography

Learn how to create night-time landscape images you never thought were possible!

Shooting at night is fun, exciting, challenging, but above all, addictive! Once you start photographing the stars, the moon, constellations or deep-sky objects, you'll probably become dedicated to capturing them in greater detail, in better or different conditions, or with improved equipment. In this feature, we will share with you some basic tips that will help you get well on the way to becoming a skilled and determined astrophotographer – it doesn't have to be restricted to the pros!

Modern cameras can capture a staggering amount of detail in the night sky, if you know how to set them up right. You will need to find the right balance between long exposure times and the earth's rotation, causing stars to move and smudge in your pictures; the right balance between high ISO sensitivities to capture the best detail in the Milky Way, for instance, and keeping grain in your images to the minimum; and of course, the right balance between making do with the equipment you've got, and spending your

WorldMags.net

life's savings on a top-of-the-range professional DSLR camera and set of lenses!

Astrophotography doesn't have to be expensive. If, for example, you want to start photographing the moon, all you need is a camera that can zoom in a fair distance, with settings that go some way to control the final image. The features of even the most basic compact cameras on the market today are advancing at a fantastic rate, and night-time photography is being opened up to a whole new audience of photographers.

Pick an iconic landmark

Look for landscapes near to you that people can easily recognise. Your images have great impact if people can recognise elements within them, but see them in a completely different liaht

The Milky Way above the iconic rock archway of Durdle Door in Dorset. Using a relatively long exposure, high ISO and wide aperture (low f-number), you can capture great detail in the Milky Way



Always go out, no matter what the weather. Even the slightest changes in conditions can produce dramatic images. The more often you head out more often you head out, the more likely you are to get great results!

Shoot summer nights

The Milky Way is most visible in the summer months, although it can be seen as early as April or as late as October. Look for good, clear nights



Choose your settings

The basic settings to use are slow shutter speeds (up to 30 seconds) and wide apertures (low f- numbers). Also, use as wide-angle a lens as possible!

Essential kit Get your camera gear sorted



Camera with manual

Look for a camera that has manual modes so you can set shutter speed and aperture. A DSLR or CSC gives you more control than a compact.



A light but sturdy tripod

You will need a tripod that is sturdy enough to withstand a fair breeze, but light enough so that it's not dangerous to lug around on dark nights!



Remote shutter release

A remote shutter release will let you open the shutter without touching the camera. It also allows you to achieve longer-duration exposures.

Shoot the stars

Push your camera to its limits and capture stunning shots of the night sky

Shooting landscapes at night is a very different experience to shooting in the daytime. During the day, the camera can cope with figuring out exposure times and aperture values on its own. When it's dark, it needs a little help. When you're photographing the night sky, you basically need to tell the camera exactly what to do. But don't be daunted – there are a few

camera to Manual (M) mode so you have precise control over shutter speeds. aperture values and sensitivity, which is essential for shooting at night. Then turn off autofocus and use manual focus to focus as far-off into the distance as possible. This will ensure your stars are as perfectly sharp in your images. Don't be afraid to set your

camera to long exposures, low f-numbers numbers and high sensitivities as this is how some of the best astrophotographs (photographs of the stars) are created, and aim to shoot in locations away from sources of light pollution, such as motorways, or street lighting from towns and cities. Follow these basic principals and you should be getting good results in no time!

Wide-angle lens

When photographing an 'astroscape', or landscape astrophotograph, try to use a very wide lens/short focal length to fit in as much of the sky and the stars as possible



Visit during the day

A preliminary trip to your location during the day is worthwhile. It helps you plan your night-time shot and identify any potential hazards.



Set up your shot

Find the best place from which to photograph your location. Look at the alignment of elements in the sky, such as the Milky Way.



Pick your settings

Use slow shutter speeds (up to 30sec) and wide apertures (f2.8 or less) to capture detail in the stars. Use high ISO sensitivities if needed.



Shoot your frames

Don't settle with just one angle or position – constantly be on the lookout for better compositions of the foreground and the night sky.



The Milky Way above Portland

This photograph captures a

180-degree view of our galaxy

in some of the darkest skies

Bill Lighthouse in Dorset.

in the UK

Plan your shoot

Last Quarter

Get the place and time right

A great deal of a successful night photo shoot relies on planning ahead. Research your location to see how far away it is from a potential source of light pollution, such as a town or city, road or even a floodlit event, then check the weather forecast throughout the day of your visit. It's important that if you're going for the clearest night skies, there cannot be any clouds or haze present. The best clear nights are in the winter, but bear in mind that the best time to photograph the Milky Way is at the height of summer, as it fades away from skies in around October. Unless you want to shoot the moon itself, avoid nights when it is present in the sky, as it casts a huge glow in the sky and makes it difficult to observe most stars. And remember to pack a torch!

3 of the best...

Apps for astrophotography



PhotoPills is a relatively new app on the market, but has just about everything a landscape photographer could possibly need, particularly for astrophotography. This includes a moon calendar and a star trails mode.

Star Walk ios (£1.99/\$2.99), Android (£1.79/\$2.99)



Star Walk is a fantastic app that helps you pick out certain stars and constellations in the night sky. Launch the app and point your smartphone upwards and you'll see them in their proper place from your location.

Moonrise ios (Free)



This moon planner allows you to see moon rising and setting times, as well as its phase, for anywhere on Earth and on any date. And the great thing is that you don't have to access the internet to use it.

Capture the moon

Photographing the moon can be your first venture into long lens and deep-space astrophotography

Photographing the moon is relatively simple, can be very rewarding and produce fantastic images with relatively basic kit. A compact or bridge camera with a large zoom, coupled with a tripod, can get great pictures of the moon with relatively little cost. A DSLR with a telephoto lens can get closer, capturing fine details in the shadows cast by craters on the moon's surface. Start coupling these

lenses with extenders and you can use the resolution of your camera to crop into single features on the moon in extraordinary detail. A lot of your success will depend on nailing the focus. You need to focus the lens as far off into the distance as possible. This is usually best done by trial and error, setting your camera to manual focus, and tweaking the focus slightly with each shot.

Lock focus

Use your camera's autofocus to lock onto the moon. If you have it available on your camera, use Live View to fine-tune the focus

Fast shutter speed

When you're fully zoomed in, the moon can move in the sky quite quickly. You will want to use a fast shutter speed to eliminate any blur



Get set up

When shooting just the moon, you shouldn't require slow shutter speeds and wide apertures. Keep your ISO sensitivity relatively low to avoid grain.



Switch to Live View

If your camera has a Live View mode (common on modern DSLRs with video recording capabilities), activate it and use it to compose your shot.



Zoom in

Zoom into the image displayed on the live view to fine-tune your focus. It's important to get the moon as sharp as possible before shooting.



Focus the shot

Make tiny alterations on your lens. It helps to have a lens that has a focus read dial. Aim to get as close to infinity as possible.



Use a telescope

For those serious about astrophotography

If you want to start capturing constellations, gas clouds, nebulae and single objects in the night sky, it's time to invest in a telescope. Although they can be expensive, these pieces of kit are specifically designed to get a much clearer, closer image of the night sky.

Some come with an adapter in order to mount a DSLR or interchangeable lens camera, to help you capture what you see through the telescope. These are a good starting point, because even if you come to upgrade your camera kit, the telescope will still be able to work with your new gear.

The next level up is purchasing a tripod with a motorised tracker. When enabled, this will very slowly rotate, matching the rotation speed of the earth to ensure stars don't appear smudged in the final image. Some are so advanced that you can even lock onto one star, constellation or other deep-space object, and it will spin around and track that for you!

Upgrade your astrophotography kit



Telescope

deep space and planets in lots of detail, a telescope is a worthwhile investment. They come in all shorts of shapes and sizes to suit any budget, but support a camera.



T-mount

allow you to attach your telescope. Simply screw it into where the lens usually goes and then You'll need a T-mount camera model.



Filters

There are all sorts of filters available for telescopes that can help enhance your astro designed to help cut out light pollution, while coloured filters can in nebulas and galaxies.

Capture perfect sunsets

Master essential skills for capturing striking shots with a natural golden glow

It is well known that the best time to take photos outdoors is just before the sun sets or just after it has risen. These times of day are known as the golden hours, because the sun is low in the sky and projects a wonderful golden light across the scene. This light tends to be lovely and soft too, so it is very flattering for portrait shots, and also turns the sky incredible colours, making it ideal for landscapes as well. In fact, any shot

is likely to look better when taken at this time of day, so it really is worth getting up a bit earlier or staying out a bit later to make the most of it.

As conditions are a little dark, it can be difficult to produce perfect shots with plenty of details at sunrise or sunset. That's why we have put together this easy guide to help you get set up and shooting striking shots of stunning low-light vistas. We will show you

the kit and settings you'll need to use and how to compose your shots for the most impact, then guide you through some fun projects to try to get creative with sunset photography. Finally, you can discover how to enhance your shots to get them looking their very best, with simple tweaks and edits that will take you just a couple of minutes to do. First though, let's get you prepared for your sunset shoot.





1. Plan ahead Prepare for your sunset shoot to guarantee great shots



Find a location

Research your local area to find the best spots to shoot from. Flickr is a handy tool for this, as you can see where other people have taken shots.



Research the time

Find out when sunset is and get there at least an hour before. Apps such as Sunrise Sunset and Sun Seeker will help you track the sun.



Check the weather

You'll need to know the weather so you can be prepared for any rain. It will also help you determine whether there will be clouds for extra interest.



Pack your bag
If you're planning to shoot the sunrise, it is best to get all of your kit ready the evening before so you can simply grab your bag and go in the morning.



3. Pick your settings Control your camera for shooting stunning sunsets

Most cameras have a sunset scene mode that will pick the best settings for you and capture the colours in the scene as vividly as possible. However, to take more control over your shots, it is best to use Manual mode. Start by selecting a narrow aperture (high f-number) to keep everything in focus and capture as much detail as possible. Then pick a slow shutter speed to capture plenty of light.

If you're shooting handheld, you'll have to use a speed of 1/60sec or faster to keep your shots sharp, but a tripod will allow you to use much slower speeds and still produce blur-free images. If you can, keep your ISO as low as possible. If your shots are too dark, use a slower shutter speed to brighten them. However, if you're shooting handheld, raise your ISO instead. Be aware that high ISOs can cause your shots to become grainy though, so avoid pushing it too far.



DETAILED VISTAS

To make sure your sunset shots contain as much detail as possible, take your time when choosing the exposure settings





Adjust the white balance To boost the colours in your shot, set your white balance to Shade. This will warm up your shot to make it much more vibrant. Alternatively, you can warm it up later using editing software.



Exposure compensation Often, the best way to fix your exposure is with exposure compensation. Press the button with the '+' and '-', then increase it to brighten your shot or decrease it to darken.



Try HDR Take several photos at different exposures on the compensation scale then merge them together to create one perfect HDR shot using editing software.

WorldMags.ne

4. Compose landscapes for impact

Framing tips for capturing striking sunsets

Sunrise or sunset is usually pretty spectacular in itself, but that doesn't guarantee that your photos will be stunning too. Rather than just pointing your camera at the sun and firing the shutter, put some more thought into how you frame your shots to make them truly striking. There are several 'rules' of

composition that you can use to help you produce the most engaging image possible, but don't be afraid to trust your instincts and do whatever you think works best for the shot. Remember that you don't have to include the sun in your shot either, as





Composition tricks Helpful rules for engaging shots



Add some interest Include something of interest in the foreground, and silhouette it against the colourful backdrop.



Follow the rule of thirds Split your shot into a nine-piece grid and position your subject along one of the intersecting points.



Use lead-in lines Guide your viewer through your photo by including natural lines that they can follow.



Include reflections The colourful sky reflected in a lake or pond will create a great image, but try to reflect a subject too.

5. Get creative Try our fun projects to capture a sunset with a difference

Shooting at sunset is a fantastic opportunity to create silhouettes because you can easily position your subject in front of the light, as it is low in the sky. Plus, the colourful backdrop will help make your photo even more striking and dramatic. You can produce a silhouette with any camera, and it may automatically create it for you. If the sky takes up the most space in your shot, then your camera's default metering mode will expose for the bright light and leave your subject underexposed. However, if your silhouette shape is quite big in the frame, then you may need to trick your camera with Spot metering mode. Find out how below.

SILHOUETTE SUBJECTS

sailboat or lighthouse

TURN OFF FLASH Before you shoot, make sure your flash is switched off. Otherwise it could automatically fire and illuminate your subject, ruining your silhouette effect



Play with perspective

Position your subject for a fun photo

When photographing a portrait or still-life shot at sunset, you can really have fun with perspective. For example, you could get your portrait subject to hold out their hand and position the setting sun in their palm, making it look as though they are holding it up in the sky. Alternatively, try this creative idea with a light bulb, positioning the sun so that it looks like the light inside it.





Capture a sunburst

A striking shot with added flare

Lens flare is often considered a problem that should be avoided in photography, but sometimes it can look quite effective. Sunbursts are a particularly attractive form of flare, and they are very easy to create. First you need to remove the hood on your lens, if you have one, which is designed to prevent it. Then you will need to shoot directly into the sun, but make sure it is partially obscured by a tree or the horizon so that your shot is not overly bright. A narrow aperture (high f-number) and slow shutter speed will also help to strengthen the effect.

Lovely lens flare
Shooting into the sun can reduce the contrast in your shot, diving it is a finite or the contrast of the con

Shooting into the sun can reduce the contrast in your shot, giving it a dreamy atmosphere that works well for portraits and still life

6. Edit shots

Give your sunsets a boost in Photoshop Elements

Sunsets can look spectacular at the time, but you may find that your photos don't look quite as stunning. Your camera isn't as sophisticated as the human eye, so it won't always capture the scene exactly as you see it. Luckily, a few simple tweaks should fix the problem, and you might even be able to get it looking better than you remembered. Adjusting the exposure, colours and sharpness of your shots can be done in almost any editing programme, or you could even download an editing app to enhance shots on your phone or tablet. Here we will show you how to perfect your photos in Photoshop Elements and get them looking truly breathtaking.





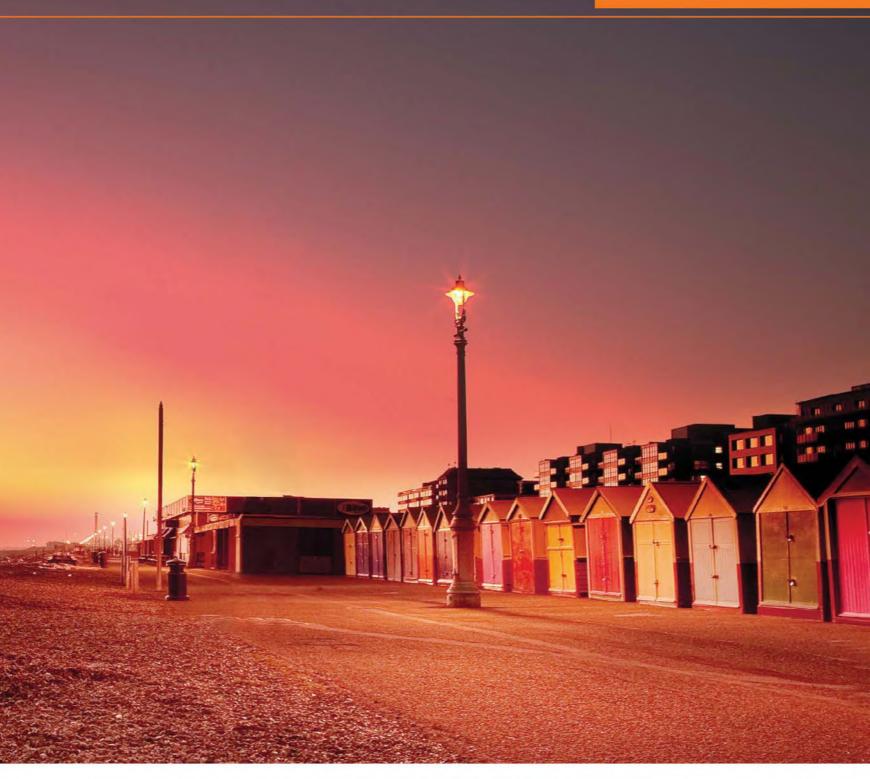
Brighten it up If your shot looks a little dark, go to Enhance>Adjust Lighting>Brightness/Contrast and increase the Brightness.



Boost the colours Head to Enhance>Adjust Colour> Adjust Hue/Saturation and increase the Saturation until the colours are bolder.



Adjust the levels Go to Enhance>Adjust Lighting>Levels. Move the left and right arrows under the histogram in and adjust the centre arrow.





Reduce noise
Now go to Filter>Noise>Reduce Noise
and increase the Strength slider, but keep the Preserve Details value high.



Remove distractions Remove distractions
Select the Clone Stamp tool and set the Opacity to 100%, then select a plain area of your shot while holding Opt/Alt.



Remove distractions II You can now paste this plain section over the distracting element. Repeat until you have removed the whole thing.



Photographing people is a great way to improve your photography skills, because as long as you have a willing model, you can practice anywhere and at any time. With so many different techniques and compositions to try, you'll never run out of new and exciting ways to approach this genre, and you don't need lots of expensive kit to get great results either. Over the next few pages you will discover our complete guide to shooting perfect portraits, no matter what your camera or budget. Along the way, we will provide you with simple, easy-to-follow advice for getting your settings and the lighting just right, and we will even show you how to improve your shots with a few home-made gadgets. You'll also discover lots of inspiring ideas

for posing your model and editing tricks for enhancing your photographs further.

Being able to take flattering photos of people is such a useful skill to learn, as it will enable you to capture stunning memories of your friends and family that you can keep forever. Whether it's a momentous occasion or just a fun day out, you will be able to document all of these precious moments that you want to cherish. You can then print and store these shots in private albums or put them on display in your home or online. So grab your camera and someone to pose for you, and start putting our top tips and tricks into practice today.

Essential portrait kit Handy photo gear to help you shoot flattering people shots





Perfect portrait lens

50mm is the ideal focal length for shooting portraits as it allows you to capture a natural representation of your subject with no distortion. A 50mm lens with a small f-number is ideal, as it will allow you to create lots of background blur.



Powerful flashgun

An external flashgun will provide a powerful flash of light to illuminate a poorly lit subject. Most models will even allow you to tilt the head. This means that you can bounce the light off of a wall or ceiling for a more flattering effect.



Versatile reflector

If there are harsh shadows across your subject's face, then a reflector will allow you to bounce the light back into the dark areas for a more even coverage of light. Many reflectors have different coloured sides for a stronger or subtler effect.



Effective flash diffuser

The light from your flash can be quite harsh, but you can easily attach a diffuser to soften the effect for more flattering results. There are lots of different types of flash diffusers available, including hard plastic covers and soft cloth alternatives.

Get set up Pick the best settings for taking perfect portraits

When taking a portrait, it can be tempting to simply point and shoot rather than risk your subject becoming bored while you set **Everything** up the shot. However, to produce a really professional looking in focus photo, it's best to switch out of auto and take control over your Using a narrow aperture settings. Therefore, it is a good idea to practise beforehand and (large f-number) will mean get everything set up ahead of time. That way you can snap away that the whole scene is in and get great shots quickly before your subject's smile starts to focus. This will make any background distractions fade. To keep your subject interested while you shoot, engage more apparent and distract them in conversation and try to make them laugh. That way, you some of the attention away will get natural smiles and expressions for your shots. from your subject. Get in the shot with self-timer If you want to practice your portrait skills on yourself first, simply set the camera on a If you're shooting in manual, set a fast shutt tripod and use the self-timer function so you have enough speed of 1/125sec or faster to freeze any movement of your subject time to get into shot and keep them pin-sharp Meter correctly Set your camera to Spot metering mode so that it measures the light for where you focus. This will help you keep your main subject well exposed and keep them pin-sharp Brighten it up If your shots are too dark, boost your ISO to increase the sensitivity to light, or fire your flash

Choose a wide aperture (small f-number) to create a shallow depth of field. This will blur the background to make your subject stand out









Keep your subject sharp

Focus accurately for a crisp, clear shot





Select a focus point

Switch to Selective Autofocus mode and position the focus point over your subject's eyes to keep them sharp.



Use face detection

Some cameras have a face detection function that will automatically find your subject's face and keep it sharp and well-exposed.



Focus continuously
If you want to get a candid shot of your subject as they move around, use Continuous Autofocus to track them and keep them sharp.

Pose your subject

Experiment with different compositions for engaging portraits

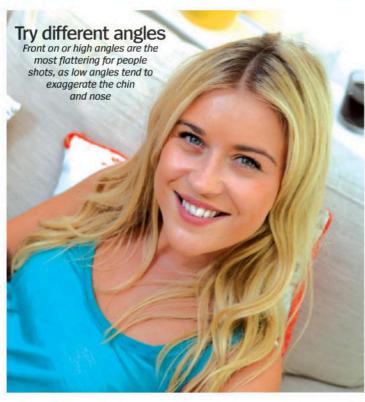
One of the great things about photographing portraits is that there is an endless number of different ways you can compose your shot. Moving your model around and getting them to try different poses means that you can get a series of great photos from just one subject and location. Even just a small change in your position or theirs will result in a completely different image, so don't just take one shot and stop there. You could use this guide as inspiration or think outside the box to try something completely whacky.

Experimenting with new ideas will also help to keep your subject engaged and give you plenty of time to practise your portrait skills.











Tips for composition

How to set up your shot



Think carefully about the colours in your shot, making sure that your subject's clothing doesn't clash or blend in with the backdrop. Too many colours or patterns in the scene will create a cluttered and unflattering image, so make sure that the tones work well together.

Leave some SPACE If you're taking a candid shot with

your subject looking away from the camera, make sure that you leave some looking space so that the viewer can follow their gaze through the photo. Otherwise you will just lead them out the frame and away from the subject.

Get them moving

Your portrait subject doesn't need to stay static for the photograph. Encourage them to run, jump and move around for a more energetic image. Just remember to use a fast shutter speed or switch over to Action scene mode to help keep them sharp in the frame.

Check the results

Once you've taken your shot, be sure to check it to make sure that your subject isn't blinking. You could try using your camera's Burst mode, which will take a series of shots, so you'll have several options to choose from to find the perfect shot.

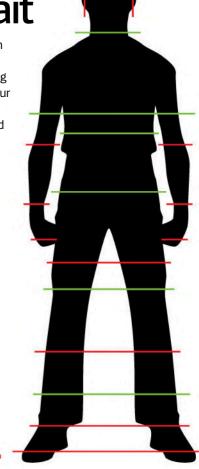
Where to crop your portrait

If you're not completely happy with the composition of your portrait shot, you can easily change it using editing software. Cropping in to your shot can help you remove distractions in the background and create a more intimate and engaging image. However, it's important to crop in the right way so as not to chop off your subject's limbs at awkward points. To help you, we've put together this easy guide showing you where and where not to crop.



Good

Bad





Flash effects The dos and don'ts of using your camera's flash



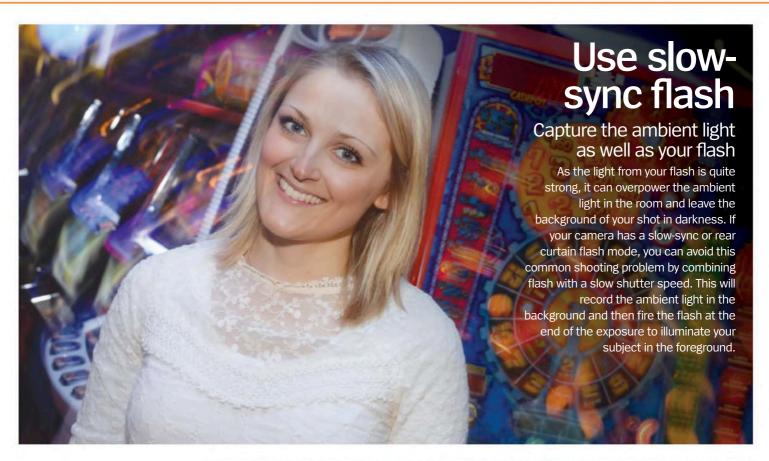
No flash If you're in a dimly lit location or your light source is behind the subject, their face is likely to be in shadow. Switch the flash on, it may not fire in auto.



Direct flash Firing your flash directly at your subject will give you unflattering results. It can leave your subject looking washed out and create strong shadows.



Diffused flash You can soften the effect of your flash by using a diffuser. You could buy one, or simply make your own by following our tutorial over the page.



Make your own flash diffuser

Soften your flash with a quick DIY fix

You don't need a fancy flashgun if you want to take flattering flash portraits, as you can achieve professional-looking results with your camera's built-in flash. All you need to do is bounce or diffuse the light to soften it a little. You can do this by holding a piece of tracing paper in front of it, or angling a piece of white paper underneath it. However, if you want a hands free solution, then follow our step-by-

step guide to discover how to make your very own flash diffuser to keep in your kit bag.



Cut up the carton Cut out one of the largest sides of a plastic milk bottle. You will need to make sure it is larger than the diameter of your lens.



Create a hole Place the end of your lens in the middle towards one end and draw around it, then cut out the circle you have created.



Attach your diffuser Poke your lens through the hole so that the rest of the plastic is above it. The translucent plastic will then diffuse the flash.



Shooting skills

Use natural light Create flattering shots using the light from the sun

Natural light is usually the most flattering light source for portraits. If you're shooting outdoors, overcast days will give you the best conditions for your shot, as the clouds will diffuse the light for soft and even coverage. Bright sunlight can be quite harsh and cause your subject to squint, so if it's very sunny then move them into the

shade or shoot with the sun behind them. You can then fill in any shadows across their face by using our flash tips on page 24 or by using a reflector. If you're shooting indoors, position your subject near a large window that has plenty of light streaming through it and follow our guide to controlling and reflecting the light.



Make your own reflector

Bounce the light on a budget



Enhance your shots

Master basic retouching techniques for perfect portraits



Whiten teeth and eyes

Select the Dodge tool and set the Exposure to 60%. Adjust the brush size and drag your cursor over the teeth and eyes.



Smooth skin

Use the Blur tool and set the Mode to Normal. Increase the Strength to 100% and then brush over the skin to smooth it.



Reflector effects

How different colours of reflector affect your shots



White reflector

A plain white reflector will create a subtle effect, lighting shadows iust a little for natural results.



Silver reflector

For a stronger effect, use a silver reflector or tin foil to reflect the light back into the shadows.



Gold reflector

A gold reflector will bounce the light and warm it up too, giving your subject a nice golden glow.



No reflector

Without a reflector, unflattering shadows may appear across your subject's face.

Master landscape composition

Follow the advice in this easy guide and instantly improve your scenic shots in no time

Landscapes are high on most people's list of favourite subjects to photograph. A beautiful location and a camera to hand is, understandably, a winning combination. When you're out and about with friends and family for a day trip or holiday, it's tempting to think that all you have to do is point your camera at the stunning scenery around you, press the shutter button and be guaranteed an incredible photo – but unfortunately it's not normally that simple. Capturing great landscape images often requires much more than just turning up in a pretty place with a smartphone, CSC or DSLR, and so it is not surprising that many people end up disappointed with the images they've

captured, instead feeling that they somehow don't quite do the spectacular scene that they witnessed justice.

This is where we can help you. Over the next few pages, we'll talk you through the ins and outs of composing fantastic landscape photos, so that you can start to turn your scenic misses into hits straightaway. We'll start at the very beginning and go through the crucial rules that turn snap shots into stunning landscapes that you'll be proud to show to friends and family. Not only will you discover the best practice for great scenic images, we'll also show you some clever workarounds to help you achieve the best possible images even if you don't have the ideal kit to hand.

Practice makes perfect

achieved simply by keeping a few key ideas in mind while you are out shooting. With enough practice, they'll become routine



Shooting skills

Rules of great composition

Learn how to compose eye-catching landscape images in-camera

Composition can make or break an image, so don't rush when framing your photo. A well-structured landscape should be balanced and eye-catching enough to draw you into the frame, which is why it's worth getting to grips with the traditional composition rules that we've outlined below. Familiarising vourself with what works will help guide you on your next shoot and also ensure you get better landscape images as a result. With that being said, don't be afraid to experiment with composition. Originality is key to getting your work noticed, so break a few a rules and try composing your next image from a unique viewpoint or perspective, especially if you're shooting at a popular landscape location.



Lack of structure

Lead-in lines should always draw you into the photo and up to the focal point but in this image they lead you out, which means the subject is lost in the background

Top four rules to master

Discover the secrets behind a strong composition

Traditional composition rules have been followed by professional photographers for many years, which is why it's important for beginners to understand how they work and why you should use them. We've outlined four of the best here, which can immediately help you on your way to becoming a better landscape photographer.



Rule of thirds

Use your camera's grid lines, which divide the scene into thirds, and position your focal point on one of the intersecting points with the horizon appearing straight along either the top or bottom line.



Lead-in lines

Lead-in lines are designed to draw your eye further into a photo. It's important to always ensure they are leading inwards towards a focal point or the centre of the frame, as apposed to away.

Balanced composition The rule of thirds has helped to add structure to this image and emphasise the importance of the focal point within the background. The inclusion of the stonewall in the foreground also gives the image more of a three-dimensional, layered feel

Framing the view

Look for unique natural or man-made frames to photograph a landscape through. Always use wide aperture, though, and ensure you focus on the landscape within the background.



Foreground interest If there's a lot of detail in the background of your landscapes, balance the frame by including a subject within the foreground, whether it's flowers, rocks or even a man-made structure.



Photo hacks for great vistas

Handy tricks to ensure you get great shots on the go



Filter the frame

A quick fix for achieving good exposure in bright conditions is by positioning your sunglasses in front of the lens. It works in a similar way to an ND filter.



Find support

If you're caught short without a tripod on an impromptu landscape shoot and need to steady your camera, position it on a nearby secure structure, such as wall.



Steady your tripod

Affordable tripods can be a bit lightweight, especially when windy. Keep it steady by attaching your camera bag to the central column, which will help weigh it down.



Use self-timer mode

Use your camera's built-in self-timer to release the shutter when using slower shutter speeds. It will help eliminate all possibility of camera shake.

Shooting skills

Frame your image

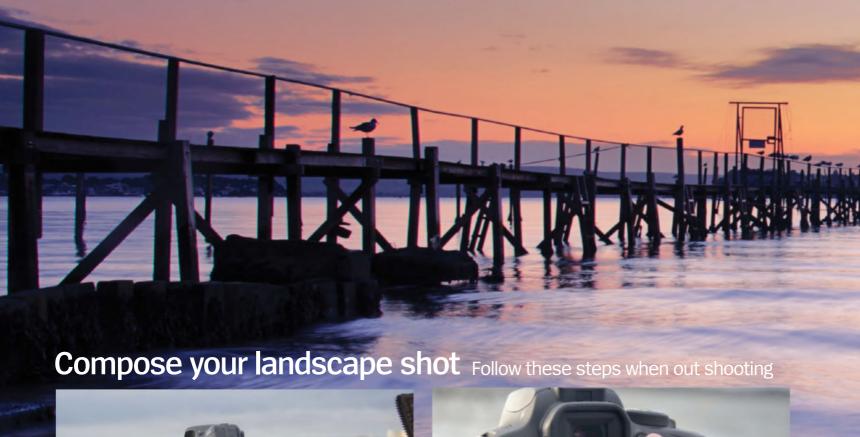
Now you know the rules, it's time to take your spectacular shot

We've taught you some of the key rules for shooting landscapes, such as using foreground interest, so now it's time to go out and get your shots. Let's think about the framing a little further, though.

The first thing to consider is what aspect image that's worked out by comparing the width to the height, which is then displayed as a ratio. 3:2 is usually what your camera better in other formats. The aspect ratio 5:4 is pleasing when working with foreground and background elements, but turning to a portrait composition with a 2:3 can completely alter a shot. A 16:9 panoramic scene into the frame. You can change the

worth taking time to work out what's best

When you're at the location, take a look at can incorporate them into the frame, such step-by-step guide below to see how it's





Steady the camera

A tripod is an essential piece of kit for landscape photography, so don't leave home without one. Steadying your camera on a tripod will not only guarantee blur-free photos, but also help you to ensure the horizon is straight when you're composing an image in-camera. Simply extend the legs to an appropriate height and then check that the spirit level is on point. You can then attach your camera onto the top plate and secure it in place on the tripod head



Compose on the screen

Strong composition is key, so take your time when framing your photo. Start by selecting your camera's Live View mode, which will offer a better view of what's in the frame. You can also activate the built-in grid on the screen via the menu, which is particularly useful when you're following the composition rules. Don't forget to adjust your lens focal length too – a wide setting (between 18-35mm) will enable you to fit more of the vista in your photo.

Planning ahead

Ensure you capture a great image by doing a little research before you leave to find the best viewpoints. Try to arrive a little earlier than necessary so that you're set up and you've worked out your composition before the light fades too much



Patience is a virtue

A simple setup and patience is all you need to take great shots. Simply assess your scene and take time to consider how to frame its elements

Find your focus

If your camera has touchscreen capabilities you can position your focus point by tapping on-screen. Alternatively move the point using the D-Pad



Adjust settings

Select the Landscape scene mode for the camera to take care of the settings, or switch to Aperture Priority (A or Av). Set a low ISO of around settings, or switch to Aperture, around 116 to increase depth of field. The 200, then select a narrow aperture, around f16, to increase depth of field. The camera will pick the correct shutter speed. It's likely a slow shutter speed will be selected for an even exposure, but provided you're using a tripod, images will still appear sharp, as only moving elements, such as water or clouds, will blur out.



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Focus the frame

O4 Finally, you'll need to set your focus point. Use the D-Pad, unless the LCD is touchscreen, and position your focal point around one third of the way up into the frame. This is generally the best focus point position for landscapes when you're using a narrow aperture, as it will maximise the increased depth of field. Once in place, half-depress the shutter button to lock focus and then release using a remote device or via the camera's built-in self-timer.

Shooting skills



Black and white vista

Discover how to shoot and edit a striking monochrome

What you'll need...

✓ Digital camera✓ Editing software

- Nikon D3200
- ✓ Photoshop

You could use...

- ✓ Any camera ✓ GIMP
- What you'll

learn... ✓ How to shoot a

- your shot to black

01 Control the grain

The digital grain caused by high ISO values is more noticeable in monochrome shots. For crisp photos, keep it low, but if you want a gritty effect then give it a boost.

03 Look for texture

Interesting textures are really brought to life in black and white images, so avoid flat, smooth surfaces and look for things like wood, clouds and rope that have more depth.

05 Keep both copies

When converting your photo, make sure you keep a copy of the colour version. Then you can go back to the original if you change your mind about the monochrome effect.

02 Include contrast

Scenes with plenty of contrast in tones look great in black and white as it gives them some depth. This is why monochrome landscapes with cloudy skies look particularly striking.

04 Focus on composition

Without colour in the scene, an engaging composition is even more important. Look for lead-in lines that will guide the viewer though your shot, or position your subject off-centre.

06 Consider colour tones

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To make sure your monochrome landscape has plenty of depth and contrast, shoot with a red-coloured filter or boost the red tones when converting to black and white.



Focus first Your camera might struggle to focus by itself in low light, but switching to manual focus will allow you to give it a helping hand and keep the shot sharp **Delay the shutter** When using slow shutter speeds, simply pressing the shutter release can jog the camera and blur your shot. To avoid this, use a remote shutter release or self-timer mode to shoot hands-free. Capture accurate colours Set your camera's white balance mode to Tungsten/Incandescent, as this will keep the car headlights the right colour and prevent any warm Light trails or cool casts from spoiling your shot Blur traffic headlights for a creative low-light long exposure



3 steps for... Shooting your own light trail



Set up the camera Switch to Shutter Priority mode and select a slow shutter speed of around 5-20secs. The slower the speed, the more blur that you'll capture.



Secure your kit To avoid a shaky, blurred shot, it's absolutely essential that you secure your camera to a tripod or rest it on a sturdy surface.



Your images will be bright enough when using slow shutter speeds, so you can keep the ISO (sensitivity) low to avoid unwanted grain.

Step-by-step guides to creative projects that really make your shots stand out

124 Make a fanciful greeting card aunt vour artistic side

128 Create a low-light landscape canvas Make your own wall hanging

32 Create a living panorama Explore Panorama mode

134 Create a cool profile picture Impress your friends with a fun portrait

138 A vintage-effect landscape photo Give a photo a nostalgic feel

142 Capture a creative shadow portrait

A creepy composite

















What you'll need...

- Digital camera
- ✓ Pavement chalks
- ' Stepladder Editing software

We used..

✓ Canon EOS 600D ✓ Photoshop CS6

You could use...

Elements

- ✓ Any digital camera ✓ Photoshop
- What you'll learn. How to shoot a
- creative chalk illustration portrait and create a unique greeting card

As kids we've all had fun creating drawings with pencils and chalks. You may have even daydreamed about jumping into your drawings and exploring the illustrated world you've created. But what if we told you that you could make your drawings come to life through photography? Well, with this month's Big Project we're going to show you how to do just that.

The best part about this technique is that it only requires a handful of ingredients, and most of which you'll already have lying around the house. The first ingredient is fairly obvious, and that's a camera. Just about any camera will work, be it a cameraphone, compact or DSLR. Next you'll need a large, flat area of concrete or tarmac to use as your backdrop - a big, empty driveway is a good choice. You're also going to need a set of chalks to draw with. Ideally these need to be chunky pavement chalks, as the thinner chalkboard variety are likely to snap or wear out too quickly. If you

don't have any pavement chalks to hand, they can be easily purchased from most toyshops for around £1/\$1.50 a set.

Although we've kept our image fairly simple with a set of colourful balloons, don't be afraid to take things a step further and really get creative with your chalk backdrop. If you're lucky enough to have access to a large area of blank tarmac to use as your canvas, you'll be able to create much more elaborate backdrops. Why not try adding a few birds or clouds to the sky? Or maybe even add in a few chalk houses and trees to the bottom of the frame to really give your image a sense of depth? The possibilities are almost endless, so think outside the box and let your mind run wild. Why not get the kids involved too, as they'll have loads of fun helping you draw out the background and posing for the photo.

Simply read on and learn how to create a unique greetings card that your friends will be sure to treasure.

Shoot How to set up and shoot your portrait



Draw your balloons Start off by finding a large, tarmacked area on which you'll be able to draw out your chalk balloons - a large driveway or empty car park is ideal. Then, carefully sketch your balloons using your coloured chalks.



Use Aperture Priority To ensure that the image is pin-sharp from front to back, you'll need to use a small aperture (large f-number). So, switch the camera to Aperture Priority (A or Av on the mode dial) and set an aperture of f8.



Increase the ISO Unless you're shooting on a really sunny day, increase the camera ISO to 400 this will ensure that the camera is able to achieve a fast enough shutter speed in order to prevent your images from blurring.



Use a stepladder You'll need to use either a stepladder or stool in order to get a higher perspective to shoot from. So place your stepladder on a solid surface and carefully climb it to shoot down onto your model.



Position your model Ask your model to lay on the ground with their hand stretched out towards the chalk balloons, making a fist as if they're grabbing the strings. Once you're happy with their position, ask them to stay still.



Take the shot Look through the viewfinder of your camera and frame up the shot. You may need to use a wide-angle lens to fit everything in the 18mm end of an 18-55mm kit lens will do fine. Focus and take the shot.

Other ways to share your chalk portrait



Personalised mugs

Why not spruce up your kitchen with a personalised coffee mug? It also makes a great birthday or Christmas gift, letting you share your creative photography with friends and family.



Mobile phone case

One of the best ways of showing off your creativity wherever you go is with a custom printed mobile phone case, and they come in a range of fits for most smartphone models.



Keyring

Why settle for the standard style of keyring when you can create your own unique, customised design showing your own photography? Not only that but they're affordable too.

3 of the best... Apps for photo gifts

PhotoBox Free (iOS)



Upload your images to the app and order photo prints, as well as a range of other photo gifts, directly from your smartphone or tablet.

Snapfish Free (iOS/Android)



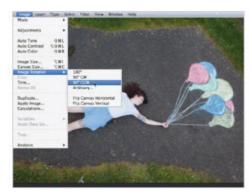
Snapfish allows you to browse through your photos and organise them into smart clusters, then upload, share and order prints

Tesco Photo Free (iOS/Android)



This app allows you to view and order prints from a smartphone or tablet. then simply collect your finished prints from a local Tesco store.

Edit Enhance your shot with Photoshop Elements



Rotate your photo With your image open in Elements, the first step is to make sure that it's in portrait orientation. If your photo is landscape, go to Image>Image Rotation and click either 90° CW or 90° CCW to rotate it.



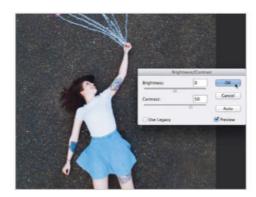
Clone out distractions Grab the Clone Stamp tool from the toolbox, then while holding Opt/Alt, set the sample point over an area of tarmac. Using a soft brush, carefully paint over any distractions (like the grass) to remove them.



Crop the image Now, grab the Crop tool from the toolbox and click and drag out a tighter crop over your image. Hold down Shift while you do this to keep the crop in proportion. Once you're happy, hit the Enter key.



Boost colours Head up to Image>Adjustments> Vibrance. In the window that appears, move the Vibrance slider to the right to increase the intensity of the colours within your image - a value of +80 worked for us.



Increase contrast Next it's time to boost the contrast within the image, so go to Image> Adjustments>Brightness/Contrast and in the window, drag the Contrast slider to around a value of 50. Click OK once you're happy.



Add a vignette Go to Filter>Lens Correction and in the window, click on the Custom tab. Locate the Vignette options and then move the Amount to -50 and the Midpoint to +90 before clicking OK.

Share Create custom greetings cards with PhotoBox



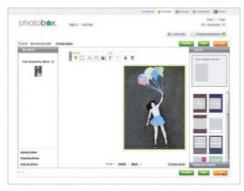
Visit Photobox.co.uk Open up your web browser and go to www.photobox.co.uk. On the PhotoBox homepage, hover your mouse over the Cards tab at the top, then from the drop-down menu, click on the 'View all cards' option.



Choose blank card On the next page, click the Blank Card option from the list and you'll be taken to the following page, where you can select the size and number of cards you'd like to make. Once done, click 'Create yours now'.



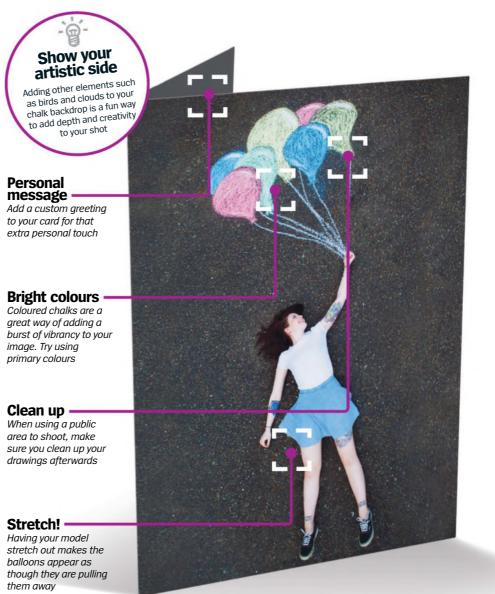
Upload your photo On the left-hand side of the screen, click the Get Photos button, then click Choose Photos in the window that appears. Locate your image and click Open; now simply wait for it to upload to the PhotoBox website.



Add your image Your uploaded image should now appear on the left-hand side of the screen. Click and drag it over the top of the template to place it onto your card, then use the Zoom tool to better position it.



Write a message Beneath the card template, click where it says 'Inside' to see the inside of the card - you can add text by clicking on the boxes on the template. Once you're happy, click Order to complete your order and pay.



Starter projects Create a low-light landscape canvas Make your landscapes stand out and turn them into art to liven up any living room What you'll need. ✓ Wide-angle lens ✓ Sturdy tripod ✓ Remote release ✓ Editing software We used... ✓ Canon EOS 5D MKII ✓ 17-40mm lens ✓ Photoshop You could use... ✓ Wide-angle adaptors ✓ Brand-specific Light is the main factor in any editing software ✓ Self-timer mode kind of landscape photography, and you'll What you'll learn... ✓ How to create a discover that dawn and dus striking landscape are the best times to sho for the most appealing results canvas to display **128** Digital Photography for Beginners

Composition can make or break a landscape image, and by using simple composition techniques, you can turn a basic view into a masterpiece. Many people shoot landscapes in the landscape format, standing at full height and pointing the camera directly at the subject. This can produce good shots, but they don't tend to be very eye-catching. Altering the orientation can really make an image stand out.

However, care needs to be taken with what is included in the shot. Compositionally, the frame is split into three sections: the focal point, the middle distance and the foreground. The latter is one of the most important features of a landscape. Fill the frame and ensure there are no empty spaces, using leading lines to draw the eye.

It's a well-known fact that light is the main factor in landscape photography and that dawn and dusk are the best times to shoot. The golden hour happens during the last hour of sunset and the first hour of dawn after sunrise. During these times light levels are low, meaning that exposure times will be longer than usual. A reliable, sturdy tripod is a must-have for situations like this – it will keep the camera steady and shake-free, ensuring you produce pin-sharp images.

Over the next few pages we will show you how to employ some simple techniques in order to create low-light landscapes with awe-inspiring impact. We'll also show you some top editing techniques, as well as how to turn your vista into a beautiful canvas print to display to your friends and family.



Shoot Six steps to taking better landscapes



Look for foreground interest Look for anything that will draw the eye into the frame, add visual interest and fill the lower third of the image. In our image, the fencing ties the photograph together, gives some great texture and contrasts nicely with the landscape.



Use a tripod Tripods are important to keep the camera steady and shake-free. Once in place, using a remote release will guarantee sharp images. You can also use the camera's self-timer to shoot the image so you don't move the camera when you press the button.



Choose a focus point It's important to focus the lens in the right place. A rule of thumb is to focus on the third – split the frame into three sections and focus on the end of the first third line. Either select Single AF mode and move the focus point, or use manual focus.



Keep horizons level A common mistake in landscape photography is wonky horizons. Try using a small spirit level that attaches to the hotshoe of your camera to see when your camera is level. Alternatively, grid lines in the viewfinder or in the Live View mode are useful.



Pick a camera position With the camera on the tripod and using a wide-angle lens, tilt the camera downwards so your foreground subject starts almost by your tripod feet. This makes the foreground subject loom up. Be careful not to include your tripod feet, or your own!



Settings Landscapes need smaller apertures (high f-numbers) to keep them sharp from front to back – f16 is a good start point. You may be tempted to increase the ISO to brighten shots, but try to keep this low and use a slow shutter speed.

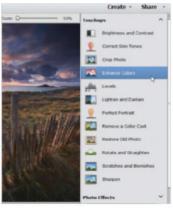
3 of the best...

Features for landscapes in Elements



Make quick adjustments

If you are not yet ready to use the Expert mode in Elements, the Quick interface has plenty of extremely easy-to-use adjustments for lighting, colour and exposure.



Get a guide

Many of the Guided edits are ideal for landscapes. Here, you can have Elements talk you through the steps involved in enhancing the colours or adjusting the levels.



Straighten the horizon

Although a Guided edit exists for this, it's simple and rather fun to straighten a slightly wonky horizon using the Expert Straighten tool. Just drag along the line you want to be straightened.

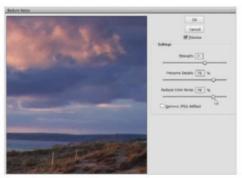
Edit Transform your scenic shots in Photoshop Elements



Increase the contrast Head to Expert mode in Elements and activate Layers. Go to the half-moon symbol at the top of the Layers palette and create a Brightness/Contrast adjustment layer. Take each slider towards the right, while keeping an eye on its impact.



Add some warmth Even if you've got a high-end camera, the processor can be fooled by high-constrast scenes that are shot facing into the sun, as this one is. You may find that your image isn't warm enough. Use a Photo Filter adjustment layer to correct this.



Tackle image noise You may notice colour noise, particularly if you've used one of your camera's higher ISO sensitivity settings. It's fairly easy to reduce this using Elements though. Head to Filter>Noise>Reduce Noise and adjust the sliders using the preview.



Boost the saturation Create another adjustment layer. This time you're going to boost the saturation using Hue/Saturation. Don't go too far with the slider, especially as the next step will impact on colour. As you're working with Layers, you can always readjust this later.



Remove image flaws Once you're happy with the adjustments you've made, go to the Layers menu and choose Flatten Image. Now you can remove any specks of dust or unwanted flare that's visible in the photo with the Spot Healing Brush tool set to Content Aware.



Sharpen the shot Most images benefit from some quick sharpening to improve definition and clarity. Unsharp Mask in Elements, found in the Enhance menu, provides an excellent facility for this. Similar tools are available in most image-editing programs.

Share Upload your photo and order a stunning canvas print



Save as a JPEG Many online canvas-printing services will only be able to work with JPEG files, so save your enhanced image in this universal format by going to File>Save As at the top-left of the Elements interface. Ensure that you select the maximum quality settings.



Upload the image Once you've selected to upload a file from your computer, a pop-up window will appear, enabling you to navigate to the precise location of your image, which you can then either select or drag and drop to an upload window.



Choose your photo Depending on the size of your image and your connection speed, the uploading process may take several minutes. Ensure that the image you want is selected and then select the orientation and whether you want it to have a border or not. Finally, click Order.



Search for a service There are many companies online who can create a canvas from your images. Prices vary, of course, so you'll need to do a search online to find a service that suits your budget. We opted for www.photobox.co.uk for our canvas.



Find your photo Many printing services now provide you with the choice to print images that you've previously uploaded to Facebook, Instagram or Flickr. For printing a canvas, it's best to work with a file that's uncompressed and saved directly to your computer.



sufficiently quality for a good result

Ensure you've edited

Make sure you take time over your edits so that the colours and details really pop

What you'll need... Camera with Panorama mode ✓ Model

We used... ✓ Samsung NX30

You could use... Cameraphone

✓ Group of people What you'll learn... How to capture a

Create a living panorama photo

Get creative in your camera's Panorama mode



Create your panorama Step-by-step guide to seamless results



Give clear instructions Once you've found the perfect spot for your panorama, instruct your model on where they will need to move to during the exposure. Make clear marker points so they know where they need to stand.



Select Panorama mode Turn on your camera and locate the Panorama mode. You'll need to check your camera manual to ensure it's available. Panorama mode may be represented on the mode dial or could be found within the menu.



Get into position Ensure your focus is set to Auto. Once you're ready to shoot, hold the camera up in front of you with your feet shoulderwidth apart and your elbows tucked in to ensure a steady panning movement.

Panoramas are a fantastic way to fit more in the frame, which is why they are so popular with landscape photographers. But as we'll show you, they can also work well with people pictures. In this tutorial, we'll take you through the technique of capturing the same model multiple times within a panorama. Your model will need to move frequently across the frame while you pan, but it's really easy to achieve in almost any camera, including a cameraphone, provided Panorama mode is available.

Dedicated panorama shooting modes can be found in most new camera models. They are designed to guide you through the shooting process and are able to automatically stitch the frames together for you, ensuring a seamless end result. We will be using a CSC camera to demonstrate this tutorial, which has a dedicated Panorama mode, so check your camera or cameraphone's manual or menu options to see if it's available on your particular device.

If you have an older camera model or a straightforward, no-fuss DSLR that doesn't come with a Panorama mode, don't be disappointed; it's still possible to try this technique, but you'll need to shoot individual, overlapping frames and then stitch them together manually in editing software such as Elements or Photoshop. A tripod with a rotating head will also be necessary for an even result. Just remember to pan slowly and steadily to create the ideal shot.





Frame your model Swivel your hips so that the camera is facing in the right direction for the start of the panorama. Frame your model on screen, then hold down the shutter and begin to pan slowly using the camera's guidelines.



Pan steadily Sweep slowly and steadily for a seamless result and instruct your model to move to their next position as soon as they appear on screen. Keep panning until your model appears three times in the shot.

Cycloramic

Become part of the image by capturing a panorama hands-free with the Cycloramic app. Simply position your iPhone 5/5s upright on a flat surface. The app will then use the phone's internal vibration feature to rotate the device and capture a

seamless panorama. This feature is currently in development for Android devices, although other panorama features are still available to use in the meantime.



Impress your friends with a fun portrait

"Perform some digital trickery in editing software"

What you'll need...

- ✓ Digital camera ✓ Tripod
- Editing software

We used...

- Canon EOS 600D
- Slik tripod ✓ Adobe Photoshop

You could try...

- Any digital camera Adobe Photoshop Elements
- What you'll learn.. How to create
- a picturepicture image

Self-portraits are becoming increasingly popular in the modern world. This is especially true when it comes to social networking sites, as most require you to upload a photo of yourself to be used as your profile avatar. This picture is often the first thing that people will see when browsing your networking page, so why not get creative and try capturing something that's a little bit different?

For some people, the idea of taking a self-portrait might be slightly daunting. This is usually because we're so used to being behind the camera that the idea of posing for our own shots may seem alien at first. But in practice, it's actually a lot of fun, and with yourself as the main subject of the picture, it's something that you can try out whenever you like.

One of the biggest benefits of digital photography is that it allows us to perform some digital trickery using editing software. One great example of this is creating a portrait within a portrait. This requires taking a

photograph of yourself holding a large photo frame and then using editing software to cleverly copy the image inside of the photo frame over and over again so that it resembles a never-ending tunnel of images. The result is one that's truly mesmerising and makes for an interesting profile picture on social networking sites. What's more, the great thing about this technique is that you don't need any expensive or sophisticated photo equipment either; it can be done using just about any type of camera, including a simple point-and-shoot or even a cameraphone. You will need a tripod, however, to set your camera up on, or alternatively you can rest it on a straight, flat surface.

To find out how to shoot, edit and share your own creative avatar now, just follow along with our simple step-by-step guide below and we'll show you everything you need to create your very own mind-bending picture-ina-picture self-portrait.

Shoot We show you how to capture a creative self-portrait



Choose a location Using a location with a chair or bench is a good idea as it will act as a marker, so you always know where to be. It's also handy if you're holding a heavy frame as it means you can take the weight off.



Set up your tripod A tripod will enable you to take the shot and be in the photo at the same time. Once you've set your camera up on a sturdy tripod, frame the image, making sure you leave enough headroom to fit in the photo.



Select Aperture Priority Set the camera to Aperture Priority (A or Av) and dial in an aperture of around f5.6 - this should nicely blur distractions. Don't worry about the shutter speed as the camera will set this for you.



Focus the shot Place the picture frame roughly where you'll be sitting and focus on it by half depressing the shutter button. Afterwards, switch to Manual Focus (MF) to prevent it re-focusing when you take the shot.



Use the self-timer Activate Self-timer mode to give you enough time to get into position once the shutter button is pushed. Alternatively, you could ask someone else to push it for you or use a remote shutter release.



Take your image Fully depress the shutter button and get into place for the photo. Review the shot on the rear screen and make any compositional changes that you need to make. Carry on shooting until you're happy.

Accessories for taking self-portraits



Tripod

When it comes to taking a self-portrait, investing in a sturdy tripod is absolutely vital, as it'll allow you to keep the camera held securely in position while you're busy getting ready for the photo!



Wireless shutter release

A wireless shutter release is a handy tool that lets you take a photo from a distance using a small remote. What's more, with prices starting at around £20/\$33, they're affordable too



Flip-out LCD screen

If you own a DSLR with a flip-out LCD screen, try activating the camera's Live-view function an use the flip-out screen to view yourself while you

3 of the best...

Apps for sharing



Twitter is a microblogging service that lets you send and read 'tweets' from other users, which are either short. 140-character messages or photos.

instagram Free (Android/iOS)



Instagram is a free social networking app that allows you to apply funky film effects to your images and then share them with other users.

Flickr Free (Android/iOS)



Flickr allows you to upload and share your images with other photographers around the world. Creating an account is quick and completely free to do

Edit Construct your picture-in-a-picture in Photoshop



Duplicate the layer Create a duplicate of the image on a new layer in the Layers palette (Window>Layers). Do this by Ctrl/rightclicking the Background layer, choosing Duplicate Layer and then clicking OK.



Resize to fit Head up to Edit>Free Transform, then click and drag one of the corner tabs to resize the layer to roughly fit the photo frame. Holding Shift while you resize will make sure that the layer stays in proportion.



Move into position If the layer isn't in the right position, click and drag in the centre of the image and move it into the right place. If you need to make further size adjustments, you can also do this now.



Rotate the layer Move your mouse to the outside edge of one of the corner tabs, then click and drag to rotate the layer until it matches the angle of the frame. Once the image roughly fits the frame, hit Enter to confirm.



Tidy up the edges Click the eye icon next to the top layer in the Layers palette, then grab the Polygonal Lasso tool and trace the inside of the frame. Go to Select>Inverse, then press Delete before going to Select>Deselect.



Repeat until complete Click the eye icon next to the top layer to reveal it again. Now simply repeat steps 1 to 4 but duplicating the top layer instead of the background. Keep doing this until you've filled in all of the frames.

Share Upload your image as your Facebook profile picture



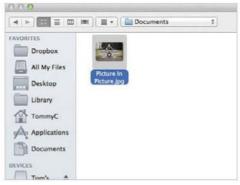
Log in to Facebook Open up your web browser and type www.facebook.com into the web address bar. Type in your log-in details at the top and click Log In. If you don't have an account, create one using the Sign Up section.



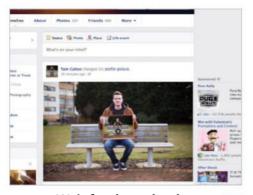
Go to your page Once you've successfully logged in to your account, head up to the top-left of the window and locate your current profile picture. Next to it you should see your name - click on it to visit your personal profile page.



Edit your profile picture Hover the mouse over your current profile picture in the top left-hand corner of the window and you'll see the Edit Profile Picture option appear. Click on this and from the list of options, select Upload Photo.



Upload your image In the File Upload window that appears, navigate through your computer files and locate your picture-in-a-picture image. Click on it, then click the Open button at the bottom-right of the window.



Wait for the upload Your image may take anywhere up to a few minutes to upload depending on the speed of your internet connection. Once the upload is complete, you'll see your new profile picture appear in the top-left corner.



Update With your image uploaded, your friends will be informed about your new picture

Share Clicking 'Share' will allow you, and others to show off your image with other users

Comments Your friends can also give feedback about your new photo by hitting 'Comment'





A vintage-effect landscape photo

Capture a stunning vista and give it a nostalgic feel



What you'll need...

- ' A digital camera **Editing software**
- software or app Social network profile

We used...

- Samsung NX1000
- Photoshop
 Elements 11
- ' Pinterest

You could try...

- ✓ Any digital camera ✓ GIMP
- ✓ Flickr

What you'll learn...

- shooting tips Creating retro effects

Retro photography is very popular at the moment, thanks to the vintage filters of apps like Instagram and the nostalgic look of Lomo images. Lomography is a movement that started in the early Nineties after the founders discovered the unique photos produced by toy film cameras. Lomo photos tend to feature unusual colours, with a soft focus and dark vignettes where the colour falls away at the edges of the frame, which makes them look

However, the good news is that you don't need a Lomo camera to achieve this fantastic effect, as it

can easily be re-created using image-editing software. Almost any photo can be given the Lomography treatment, from portraits to still life and landscapes. It is important to make sure that the most important part of your image is positioned in the centre of the frame, otherwise it will become obscured when you add the vignette.

This easy-to-follow guide will show you how to take a great landscape that's perfect for a retro makeover, then give it the Lomo look in Photoshop Elements, and finally post it onto Pinterest to share with the world



Our unedited shot The original image we took was bright and colourful before we added the vintage edits, giving us a good base to work from

Shoot Take a beautiful landscape photo

particularly retro.



Choose your aperture Set your camera to Aperture Priority mode and then select a narrow aperture (high f-number). This will ensure that everything in your photo is in focus. You can take control of the soft focus blur in post-production using our editing tips later.



Zoom out To make sure you fit everything into the frame and leave enough space at the edges for the vignette, use the shortest focal length that your camera or lens has. You'll have to zoom right out or twist your lens so that it is set to the smallest number.



Keep it clear Make sure that your camera's ISO is set as low as possible, preferably at 100 or 200. This will stop you from taking noisy images, keeping your shots clear with lots of detail. If your shots are too dark, slow down your shutter speed or widen your aperture.



Use the gridlines If your camera has the option to turn on gridlines, then use them to help you compose your shot. The grid will help you to keep your horizon straight, position it a third or two thirds of the way up and get your main focal point in the centre square.



Use a scene mode If you are having trouble getting your settings right, you can always use a Landscape scene mode. This will get your camera to choose the settings so you can focus on composing the shot. It will often capture more vibrant blues and greens.



Steady your shot As you are using a narrow aperture, you may need to select a slow shutter speed to let enough light into the lens. Use a tripod or rest your camera or elbows on a steady surface to reduce the risk of camera shake when the shutter is open for a while.

3 of the best... Retro photo subjects



Architecture

Old building and bridges make great retro photo subjects as the image will look as



Portraits

The soft focus look is very flattering for portraits and you could get your model to wear vintage clothes for a timeless photo



Still life

Try to find retro-looking objects around you house and position them in a simple setting for an old-school still-life shot.

3 of the best... Retro camera applications

💰 Vintage Camera 🛛 Free



Take a photo and add one of a number of vintage effects. Then share your shots with your social network profiles for all to see.

Retro Camera Free



An app with five different cameras inspired by analogue models for taking retro photos. You can then upload them straight to Facebook

Hipstamatic £1.49/\$1.99

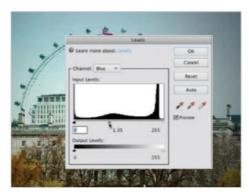


Hundreds of different retro effects can be applied to your snaps, and you can share them instantly online or order prints straight from the app

Edit Create the Lomo effect for a vintage photo



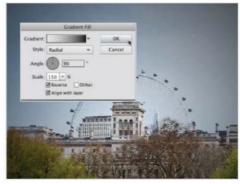
Add a vignette Open your photo and click on the Create a New Adjustment Layer icon at the top of the Layers palette. Select Gradient from the menu and choose Foreground to Transparent from the drop-down menu or by double-clicking to open up the Gradient Editor.



Change the levels Select the background layer and then go to Enhance>Adjust Lighting>Levels. Individually adjust the levels of each colour channel, bringing out the reds and greens in particular. Make sure the Preview box is ticked so you can see the results as you experiment.



Soften the focus Select the background layer again and go to Layer>Duplicate Layer. Now click on the new layer you've just created and go to Filter>Blur>Lens Blur. You will see that your entire shot is now slightly out of focus, but we will bring out the important lost detail next.



Adjust the vignette
In the Gradient Fill box, change the Style to Radial and tick Reverse. Now adjust the scale to change the strength of the vignette. Choosing a high percentage will create a subtle vignette, while a small percentage will blacken the frame's edges.



Alter the hue Now go to Enhance>Adjust Color> Adjust Hue/Saturation and move the Hue slider to adjust the colours in your shot even more, trying to keep within the blue and green sections of the slider. Again, it will take a bit of experimentation, so tick the Preview box.



Bring back the detail Staying on the same layer, click on the Layer Mask icon in the Layers palette. Select the Brush tool from the toolbar, change the colour to black and adjust the brush size as you see fit. Now brush over the main focal point of your shot to bring it back into focus.

Share Upload your photo as a pin on Pinterest



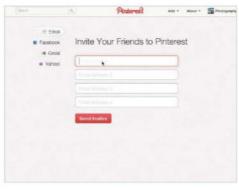
3 Sign up
Go to www.pinterest.com from your internet browser. If you already have a Pinterest account then log in. If you don't, you can join Pinterest by signing up with your email address or sign in with your Facebook or Twitter accounts, if you already have them.



Pin your photo Back on the homepage, click Add+ again and select Upload a Pin. Select your photo from your computer and then select the board you have just created from the drop-down menu. Now you can add a description to explain your photo.



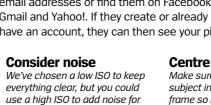
Tag your pin If you want a particular Pinterest follower to see your shot, type an @ symbol in the description box and type their name. It should then appear in a drop-down menu for you to select. Now you can pin your photo and tick to share it on Facebook and Twitter.



Invite your friends On the homepage, click your profile at the top and select Invite Friends from the menu. You can then type in your friend's email addresses or find them on Facebook, Gmail and Yahoo!. If they create or already have an account, they can then see your pins.



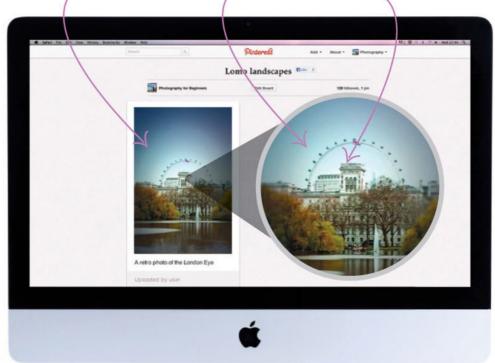
Click Add+ at the top of the home page, and then select Create a Board. A board will let you group your pins together, so give it a relevant name and select a board category. You can decide if you want it to be private and allow others to add pins to your board too.



an even older look

Centre the subject Make sure you keep your main subject in the centre of the frame so it's not covered by the vignette

Colour Look for bright colours, as dull colours will appear even more washed out when you add the effect





Capture a creative shadow portrait

Create a unique portrait for a custom mouse mat



What you'll need...

- Camera
- ✓ Bright torch or lamp
- ✓ Tripod
- Editing software

We used..

Canon EOS 600D ✓ Photoshop CS6

You could use...

Any type of camera ✓ Photoshop Elements

What you'll learn.. How to capture a creative shadow portrait

At some point in our lives we've all had fun creating shadow puppets by simply placing our hands in front of a light source in varying positions to create amusingly shaped shadows on the wall. But have you ever thought about combining shadow play with your photography in order to create eye-catching portraits? By using the same principle as the humble shadow puppet, we're going to show you how to create a truly unique image that's sure to impress your friends. And the best part is that you're more than likely to find all of the required ingredients around your house.

To start with you'll need a high-powered light source - anything from a desk lamp to a hand torch should work perfectly. If you're planning on using a lamp, make sure that it's fitted with a high-watt bulb (the higher the better), as this will make your shadow much more defined in your image. If possible, using a desk or table lamp that accepts halogen bulbs is often a good choice

as halogen bulbs generally output more light than regular bulbs, for much crisper shadows. Also, if your lamp has a shade attached, keep it on as this will help to funnel the light through the top of the shade for a more direct light source. Another lighting option would be to use a high-powered hand torch. The advantage of using a torch over a lamp, of course, is that it won't require mains power, which means that you can set up and shoot in just about any location.

When it comes to your shoot location, make sure you pick a nice big, empty wall to shoot against, as you'll need plenty of space for your shadow to be cast upon. Shooting outside against the side of your house is always a good choice if you have enough space, though try and choose a wall that is free from windows and doors for a clean and clutter-free backdrop.

With your light source and your location decided, it's time to start shooting your spooky shadow portrait!

Shoot Set up your lamp and get creating



Find a location In order to create a large enough shadow, you're going to need access to a sizeable wall to shoot against - ideally one with no windows or doors for a clean backdrop that'll let your shadow stand out.



Position your light Turn on your light source and position it at a low angle, pointing up at the wall. Stand in front of the light and experiment to see where your model needs to stand in order to create a strong shadow.



Use a tripod To create the final image, you'll need to take two images and stitch them together later on in Photoshop. To make that job easier it's best to shoot from a tripod, so set this up now and compose your shot.



Set up your camera Set your camera to Aperture Priority (A or Av on the mode dial) and dial in an aperture of f8 - this'll keep your shots sharp from front to back. Also set the ISO to 800 to increase the camera's sensitivity.



Take the first shot O Position your model in front of the light source and focus your camera on them. Switch to Manual Focus via the switch on the lens barrel to stop it from refocusing between shots, then take the photo.



Capture the second photo With the first shot in the bag, ask your model to change their stance to create a creepy-looking shadow, making sure they don't move from their spot and they don't obstruct the shadow on the wall.

Lighting options for shadows



Torch

A high-powered, handheld torch is a good choice of lighting for making shadows as it's lightweight, easy to transport and is battery powered, so it doesn't have to be hooked up to the mains



It's likely that you'll have a simple desk or table lamp at home, which will make a good light source. Using a bulb with a higher wattage will produce a brighter light for better shadows



Car headlights

If you're shooting outside and have a big area to cover, use car headlights to illuminate the scene and create dark shadows. Alternatively, use a high-powered workman's light from a DIY store

3 of the best... Apps for editing shots

Filterstorm £2.49/\$3.99 (iOS)



Filterstorm is an incredibly clever app that allows you to import and edit your images in either JPEG or RAW on your mobile device.

PhotoGene £1.99/\$2.99 (iOS)



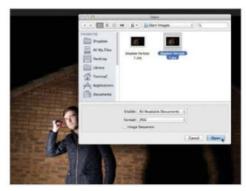
Offering a plethora of filter effects. PhotoGene is an affordable mobile app that lets you quickly spruce up your photos on the go.

Photoshop Express Free (iOS/Android)



If you're a fan of Photoshop, this free app is a great way to edit your photos similar interface.

Edit Merge shots in Photoshop for a creepy composite



Open both images With Photoshop open, open up your first image (the shot of your model posing normally in front of the light) by going to File>Open. Then, open up the second image (the image with the creepy shadow).



Copy and paste With the first image in front of you, select the entire image (Image>Select All), then copy it (Cmd/Ctrl+C). Bring the other image up by clicking its tab at the top, and press Cmd/Ctrl+P to paste in the image.



Create a layer mask In the Layers panel (Window> Layers), click on the topmost layer (it should be called Layer 1) to make it active. Click Add Layer Mask at the bottom of the panel to create a new layer mask.



Merge the layers Now, grab the Brush tool (B) from the toolbox, then set the foreground colour to black (D then X), making sure the Opacity is set to 100%. With a large soft brush, paint over the shadow to merge the images.



Boost the contrast In the Layers panel, click the 'Create new fill or adjustment layer' icon at the bottom and choose Curves. In the window that appears, create a shallow S-curve to increase the contrast of the image.



Add a colour effect While in the same Curves window, click where it says RGB and select Blue from the drop-down list. Now, gently pull up the line from the bottom-left corner to give the darkest tones in the image a blue tint.

Share Create a customised mouse mat with Vistaprint



Go to Vistaprint.co.uk Start by opening your web browser and head to the Vistaprint website, www. vistaprint.co.uk. On the homepage, click on All Products at the top, then scroll down to Photo Gifts and click on Mouse Pads.





Make any adjustments With the image uploaded, you'll be shown a mock-up of how the final product will appear. To the left of this you'll find options to make adjustments like rotate and crop. Once you're done, click Next.

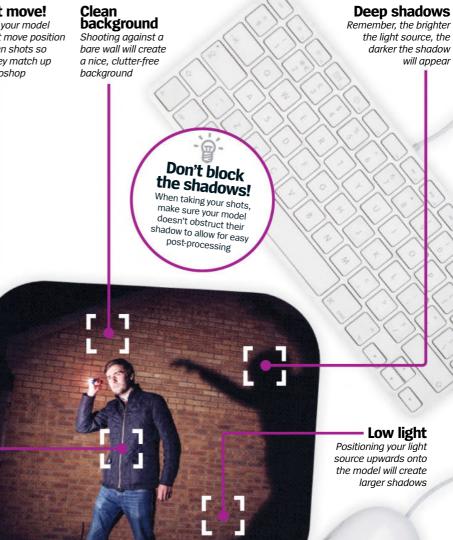


Add text or more images On the next page you'll be given further crop and rotation options, as well as the chance to insert text or additional images into your design. Once you're happy with how it looks, click the Next to proceed.



Complete your order Check over the preview image to make sure you're happy with it, then click the tick box to agree to the company's terms and conditions, before clicking Next to continue on and fill in payment details.





Editing Improve your images with these post-shoot edits then get sharing & sharing

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and looking their best **Create photo**

books online Make a lasting keepsake using online resources













Enhance your landscapes Bring out the best in your landscape images with just a few clicks in Photoshop Elements



Smart Brush

The Smart Brush performs a number of enhancement techniques with nothing more than a click of the mouse

Straighten

Make your images level with the Straighten tool. It will even fill in the gaps and enlarge the image for you

Crop

Shooting wide and cropping in is standard practice, and Photoshop Elements has features to help out here

Clone Stamp

Use the Clone Stamp to clone parts of an image to remove imperfections or any other distractions in the shot

Expert Mode

In earlier releases this is called Full. Don't be put off by the word Expert; you really don't need to be an expert to use it

Panels

Select different panels from this little menu at the bottom of the interface, including being able to see all of your image's layers





Make a new layer We want to do everything nondestructively, meaning we can return to our original image later should we wish. Working in Expert mode means we can do all our alterations on a new, separate, layer. Click the New Layer icon to add a layer.



Stamp it down Move the mouse to what needs to be fixed and click. You can 'paint' with this as well as repeatedly clicking. For best results, follow the shape of the clone area. Here we're following the curve of the hillside. We'll resample when we get to the roadside.



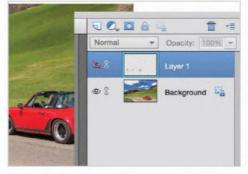
Use the Clone Stamp tool Pick the Clone Stamp tool and a soft brush that's smaller than the item being removed. Select Sample All Layers; this will put changes on the new layer. Check Aligned to keep the source and clone aligned. Uncheck this later to see the difference.



Build up areas When cloning in Photoshop Elements it's very easy to get a repeating pattern; this can be quite a distraction in itself and is a sure-fire sign of image editing. Build up textures slowly from sources around the area to make it more organic.



Find a source Hold down the Alt (PC) or Option (Mac) key and move the pointer onto the image; the pointer changes to a crosshair for you to select a source for the clone. Click down and the area under the mouse becomes a brush. You can resample like this at any time.



Erase areas We worked non-destructively so by clicking the eye next to the new layer we can temporarily hide the cloning that we've done. If it went a little wrong, grab the Eraser tool and, staying on the new layer, erase the cloning to reveal the original image.

Straighten up your images



Pick the Straighten tool Hand-holding a camera can often lead to great shots, just on a slant. Photoshop Elements allows us to correct this, however. At the bottom of the Tools panel is a Straighten Tool; it looks like a spirit level.



What's straight? Click and hold at the end of something you know is vertical or horizontal and move the mouse so that the line runs along the straight edge. Making the line longer may help you see more clearly. Release the mouse.



Fill in the blanks When you rotate you may get some blank canvas. If so, check the Auto Fill Layers in the Options bar and crop. With this checked. Elements will assimilate the texture and colour of the missing pixels and complete the scene.

Smart Brush Brighten up your sky





Select the Smart Brush Smart Brush is an automated, but non-destructive selection and enhancement tool. Click it and a contextual menu appears at the bottom of the screen. The brush will make a selection, not an effect.



Paint the edit Click on the sky and, with the mouse button still pressed down, move all over the sky. The Smart Brush not only selects the sky for you, but also adds a bit more blue to the selected area.



Pick the desired effect Clicking the small arrow to the right of the image on the left opens up a new menu. Choose 'Nature' and then 'Make Dull Skies Blue'. Set the brush size to suit your image; if in doubt, the default works fine.



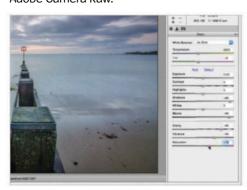
Refine the selection Use the plus and minus brushes from the top-left of the selection to refine it should you need to. The non-destructive adjustments you made can be seen in the Layers panel in Expert mode.

Edit Raw images Utilise the power of Raw

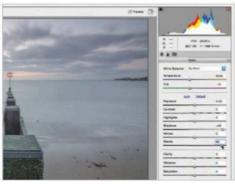




Open images in ACR If you shoot in Raw you're capturing a much wider luminance range and can edit in a Raw editor. Elements has its own editor and if you click on a Raw file, it should automatically open in Adobe Camera Raw.



Get some detail Move down to the Clarity slider and knock that up to bring out some detail. Also add a little more Saturation and Vibrance here to punch up the colours, but don't take these too far.



Bring out the shadows This image may look a little dark but there's a lot of detail we can regain. Bring up the Blacks and Shadows to reveal the detail there. If you're comfortable with histograms, you'll notice there's one here too.



Add some warmth To get a nice warm sunset glow, we'll bring the Temperature slider up to the right to around 7800. If you want to cool down a shot and add blue tones, move it to the left. Click Done.

Crop for better composition



Pick the Crop tool The Crop tool is at the bottom of the tool panel. The options for this tool are quite extensive. There are various ratios, sizes and even suggestions on how to crop. You can crop freehand too - that's what we'll do here.



Draw the crop When cropping, click and drag out the crop, from corner to opposite corner. If the shape isn't one you want, check the settings at the bottom. You may have a ratio set from the last time the tool was used.



Refine the crop When you release the mouse a bounding box appears. There are nine handles on the box, each of these can be clicked and moved to change the crop. Click the tick at the bottom of the bounding box to accept the crop.

Sharpen soft images

Edit your photos for better detail and extra impact

As photographers, we aren't given much control over the precise pixel sharpness of our images while they're being taken. We can take time to help us achieve sharper captures, however. These particular measures include making sure that there's a good focus through the lens before taking the image, and also keeping the camera steady for minimal blurriness of the scene as a whole. But when we talk about sharpness, we refer to the pixel definition and contrast between one part of the image and another, and in some

cases this might only be very subtle. The differences do show, because when you come to print the image it looks much more defined and appealing.

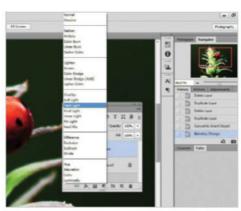
Follow these steps to discover how the High Pass filter, and a little Photoshop feature called Smart Objects, can quickly make an image look sharper. Keep in mind, though, that if you're working on an image that's really suffering from extreme blurriness, it might be too far gone to rescue.



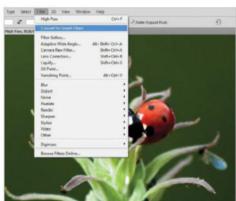
Photoshop CC Available on: Mac/PC Price: £8.79/\$9.99 per month



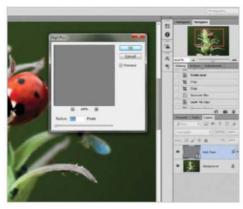
Duplicate background Before heading to the High Pass filter, make a duplicate of the Background layer (which in Photoshop is found in the Layers palette). Go to Layer>Duplicate Layer, type in 'High Pass' and hit OK.



Change the blending mode Change the blending mode of the duplicated layer to Hard Light. The image looks temporarily high contrast. Photoshop's blending modes will mean that the sharpening can be applied more naturally.



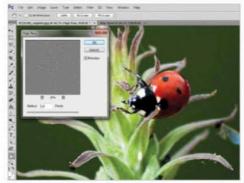
Convert for Smart Filters In Photoshop, layers can be converted to Smart Layers. What this means is that you can apply filters non-destructively to an image, so you can edit it later on. Go to Filter>Convert for Smart Filters and hit OK.



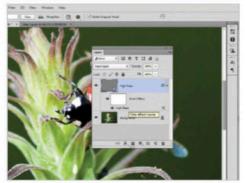
Apply a High Pass filter Now you can apply the High Pass by going to Filter>Other>High Pass. The filter has its own dialog menu that will open. Inside this, reduce the Radius slider all the way to 0.1px to see a clear before version.

option to apply sharpness to specific areas.

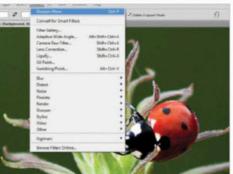




Increase the Radius Gradually slide up the Radius setting in the High Pass filter to see your image become sharper. Any higher than 3px and there's risk of creating distortion rather than effective sharpening. Hit OK to apply.



Readjust for perfection Flick the eye button next to the duplicate layer to view a before and after. Because this has been applied as a Smart Filter, you can make edits to the filter by double-clicking on the Smart Layer's name.



Something extra To add extra sharpness, select the original background layer and go to Filter> Sharpen>Sharpen More. Press Cmd/Ctrl+F to continually reapply the filter to further bring out details.

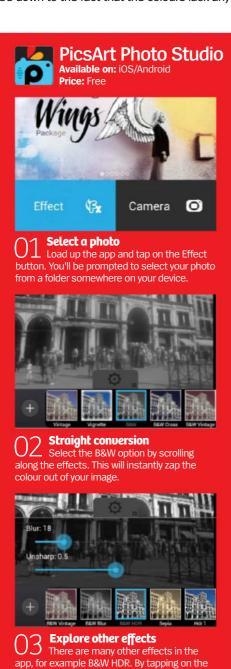
Convert to mono

Put colour aside and use black and white to your benefit

Converting to black and white is a proven way to get rid of those dull colours that can lurk around in your images, and to make them more about the composition, contrast and subjects involved than anything else.

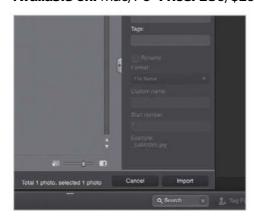
There are a couple of reasons why you may want to completely remove the colour from an image. You may want to give your images a vintage effect to create a timeless look. But another reason could be down to the fact that the colours lack any sort of impact, or don't do anything to benefit the overall composition. So what's solution? Just get rid of them!

The PhotoDirector 5 editing software, available on Mac and PC, presents a lot of different ways to reduce and remove the colour information in an image. Follow these steps to find out one way to bring new life into your photos with the power of monochrome. With a few tips and tricks on controlling the balance of the tones, your images will never look the same again.



CyberLink PhotoDirector 5

Available on: Mac/PC Price: £80/\$100



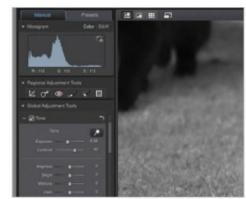
Import your image To load an image into PhotoDirector 5. press the Import button at the bottomleft of the screen. Choose Photos from the list and hit Import in the pop-up dialog menu when you find your image.



The monochrome effect To convert an image to monochrome, we have to remove all its colour. Do this by going to the Tone adjustments and sliding the Saturation adjustment all the way to the left to -100.



Tone adjustments PhotoDirector, click on the Adjustment tab along the top of the screen. By default, the Manual tab will be showing with the Global Adjustment tools.



Contrast improvement f Adapt a black and white effect by boosting up the Contrast slider to 40 and reducing the Exposure to -0.55. This will add impact to the highlights and shadows in your chosen image.

cog, you can adjust the strength of the effect





Control detail If your image has bright highlights, lower the Brightest slider to -42 and set the Bright slider to 5. This will help to balance detail in those regions. Look to keep as much detail as possible.



Midtone tweaks Set Midtone to -8, Dark to 17 and Darkest to 30 to control details in those regions. You can boost up the Clarity slider to around 50 to bring out the details even more in your image.



Better exposure Go to the Curve section and lift up the diagonal line to brighten the image without damaging the exposure. You can control the shadows using the sliders underneath the graph.

Achieve spotless skin

five minute project

What you'll need...

- ✓ Photo-editing program
- ✓ A portrait image

We used...

✔ Photoshop Elements 12

You could use...

- ✔ Photoshop CS2+
- ✔ Previous Elements

What you'll learn..

✓ How to improve your subject's complexion Learn the tricks behind using the Spot Healing Brush for retouching a portrait



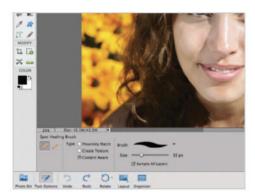
After!

When having your photograph taken, it's only natural to want to look your best. But sometimes you can be caught off guard, and the results don't always come out looking quite the way you might have hoped. That's where the retouching tools in Photoshop Elements come into play, with their instant fixes for rescuing us from embarrassing photos that we don't want to be shared countless times on social networking sites!

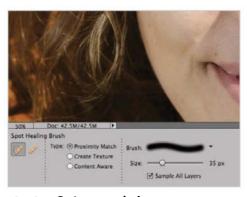
Photoshop Elements has a number of useful tools for retouching portraits. Whether you're looking to restore tones, lighten shadows, or remove spots and blemishes, all the tools are there and are easy to use once you know how. The important thing to remember when retouching someone's face is not to go too far with it. Although what we're essentially doing is improving the complexion of a person's face, these harmless edits can quickly be taken too far, as is the nature of editing in a creative application such as Photoshop. The result is someone coming out looking too retouched, and you'll notice that the skin starts to lose its natural texture and tone.

In these steps, we'll show you how you can get the most out of using the Spot Healing Brush tool to reduce spots while maintaining a realistic look. Then we'll take you through using Photoshop Elements' Brush tool to make simple but effective improvements to complexion, to produce better tones, reduce redness in cheeks and remove eye shadows. All in all, your portraits will end up looking spotless! Give it a try and let us know how you get on.

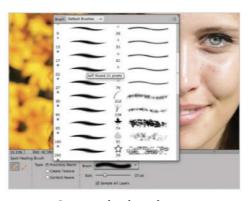
Say bye to spots! Use the Spot Healing brush



Duplicate background Load up your image in Photoshop Elements. The program has three modes (Quick, Guided and Expert). Make sure the Expert mode is active. Press [J] to locate the Spot Healing Brush tool quickly.



Get a good view Zoom into your image so the person's head fits the interface, and use the square brackets keys to resize the brush tip to fit over a spot or blemish. Resize the tip so it covers the area with room to spare.



Set up the brush Create a new layer to work on. For the Spot Healing Brush, in the Tool Options tick the Sample All Layers button and set the tool to Proximity Match and choose a soft round brush.



Remove spots With the Spot Healing Brush, click once over the area. This will remove the spot using the surrounding pixels as reference. Work your way around the face, resizing your brush as you go.

Remove shadows with the Brush



New blend mode

To lighten darker patches such as under the eyes or around the nose, select the Brush tool [B]. Add a new layer and change its blend mode from Normal to Screen.



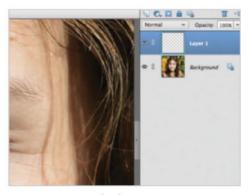
Pick a tone

Sample a light skin tone colour from the face by holding [I] (to activate the Eyedropper tool). Make sure you're using a soft brush, with its Size set to around 300px to cover larger areas of the face.



Apply your brush

By applying the Brush over the patchy areas of skin, you can lighten them to create a more even skin tone overall. This usually goes hand in hand with spot removal and other retouch techniques.



Retouch the image Because all our edits are on a separate layer, reduce the opacity of that layer, or using the Eraser tool, you can edit out any parts of the image that don't look quite right. Save out the image as a PSD file.

Reduce noise in your indoor shots

Discover how to soften the effects of noise in your photos using the Reduce Noise filter in Photoshop and Elements

What you'll need... ✓ Start image with

- Start image wit noise
- ✔ Photo-editing software

We used...

✔ Photoshop CS5

You could use...

- ✓ Elements
- ✔ Photoshop CS/CC
- ✓ GIMP

After!

Use a low ISO

Prevent noisy shots in future by setting a lower ISO in camera. Adjust your aperture, shutter speed or use flash to brighten up an image in low light instead



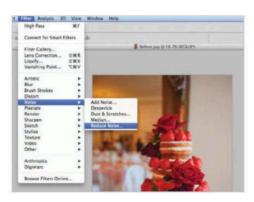
Noise has a way of creeping into photos, sometimes when you least expect it. It won't always be immediately apparent in camera either, but up close on a computer screen you'll soon recognise its gritty characteristic, especially in the shadow areas of your shots. It's not only distracting, but noise can also reduce the level of detail in your captures, which ends up meaning that you'll struggle to get good-quality prints.

Luckily there are ways to reduce the appearance of noise in your images using dedicated tools within the likes of Photoshop and Elements. To find out how to lessen the impact of noise in your photos, follow the six simple steps we've outlined below, in either software program. You'll discover how to remove both colour and luminance noise, as

well as preserve details, using the specialist Reduce Noise filter. Although a powerful tool. it's important to note that it won't eradicate noise completely from your captures. With the right level of adjustments, however, you will be able to soften its appearance considerably within a matter of minutes. We'll even show you how to bring clarity back into your shots after using the Unsharp Mask tool.

In order to avoid overly noisy shots in future, ensure your camera's ISO setting remains low on a shoot. High ISOs introduce noise as they are designed to increase the camera's sensitivity to light, essentially enabling you to capture brighter images in dark conditions. Use wider apertures or slower shutter speeds instead, particularly when you're dealing with low light indoors or outside.

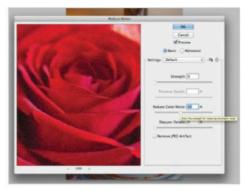
Reduce noise Lessen the effects of noise in under five minutes



Reduce noise filter Open your noisy image, then go to Filter at the top of the interface and select Noise>Reduce Noise from the menu. Once the dialog box opens, ensure you have the Preview box ticked to see each adjustment.



Preserve details To rescue some of the detail, drag the Preserve Details slider to the right. Keep the percentage low, as you don't want to reintroduce noise. Click and hold in the Preview Image box to see the results.



Reduce colour noise Zoom into the image in the Preview Image box and set all the sliders to 0. Start by reducing colour noise by dragging the Color Noise slider to the right. Any obvious red, green or blue dots should start to blend in.



Select Unsharp mask Make more tweaks to the sliders if necessary then click OK. You can now sharpen your image with the Unsharp Mask tool via Filter>Sharpen>Unsharp Mask. Start by slowly increasing the Amount slider to 80%.



Increase strength Tackle luminance noise using the Strength and Preserve Details sliders. Start by increasing the Strength, which will soften the appearance of the noise, but avoid high settings because details will begin to blur.



Sharpen edges Carefully increase the Radius slider to around 1.2px to ensure the edges within the image are sharpened. Keep the Threshold slider at 0 and click on the Preview box to review results before you hit OK.

Recompose your shots in Elements

Learn how to use the Crop tool to improve your captures



Cropping to straighten or correct an image's composition is one of the most common fixes people make to their photos when editing. We're all guilty of having said at some point while taking a shot, "I'll correct it later," but in truth getting it right in-camera firsttime round is important. By cropping an image during editing, you instantly reduce its size, which is not ideal if you were planning on making a big print. Where possible, always extend your zoom lens or move closer to your subject to compose – that way you'll lose less of the image later on if you have to make any corrections with the Crop tool.

Of course, cropping in-camera is pretty finite, so understandably most beginners opt to shoot wide and crop later if necessary. However, as your shooting skills develop and your confidence grows in composing, you'll

soon find that you only need to use the Crop tool on occasion in order to make minor improvements to your shots or explore other creative composition options.

Photoshop Elements is a fantastic image-editing program for those who want to recompose their captures or explore more creative cropping options. This is thanks to a selection of useful features available within the Crop tool, including grid guides that illustrate compositional rules such as the rule of thirds, an easy-to-use straightening tool, and a Cookie Cutter, which enables you to crop images into unusual shapes.

In this tutorial, we'll show you how to improve your shots in Elements using the Crop tool. Follow along with the steps below and find out how to straighten your images and crop in closer for a better result.

Crop your shots Improve images in Elements



Load your image Load up the Elements editor on your computer and then go to File>Open and select your start image from your desktop. Once it loads up, select the Straighten tool from the Toolbar on the left under Modify.



Select the Crop tool Select the Crop tool from the Modify menu. You can opt to add a grid to help you recompose if you're keen to ensure your image follows compositional rules such as the rule of thirds or golden ratio.

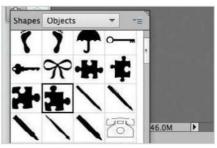


Straighten the horizon Click the Crop to Remove Background icon in the Straighten menu and zoom in to add an anchor point at one end of the horizon. Drag the Straighten line so it lines up with the horizon, click to correct.



Crop the image Position the cursor in one corner of the image and press down. Now drag the crop box to cover the entire image. Once it's all highlighted you can start to crop. Hold down Shift to constrain image proportions.

How to get creative with your crops



Select the Cookie Cutter

Creatively crop your image using the Cookie Cutter tool in the Modify menu. Select a suitable shape from the menu options that are available. Now drag the shape over your image



Crop into shape

Adjust the size of the shape by pulling out one of the corner tabs and holding down Shift. You can move and rotate the shape to fit more of the image within the area if necessary



Add to canvas

You can add your crop to a new blank canvas, which you can create via File>New. Adjust the canvas's dimension and add a colour. Drag your shaped crop on top of the canvas and save.



Recompose your shot Now pull in one corner of the crop box to a rough size you would like to crop your image to. You can select the centre of the box to move the crop area over to a precise position. Click the tick to confirm.

Rescue highlights

Retrieve detail in photos suffering from too much light

It is a pity that digital cameras aren't able to produce the same dynamic qualities for capturing light as the human eye does. In situations where you've stumbled across the perfect scenery, it can inevitably be the final exposure that can catch you out and ruin what could have been a stunning photo. There are several ways to get around this of course, and taking multiple photos of the scene with different exposures and combining them afterwards is one. But what if you only have one image to work with? That's where image editing

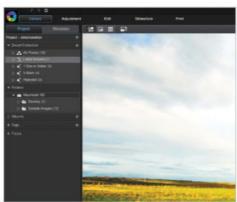
software, such as PhotoDirector, comes into the frame to adjust your shots and save the day.

In the following steps, you'll learn how easy it is to bring back detail in those specific areas of overexposure. Using special regional brushes and some quick adjustments to exposure and tone, images can be brought back to life with newfound detail. Be warned though: if your image is too brightly overcooked, then it could be too far gone to bring back and rescue from the perils of white light.

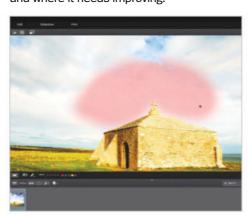




CyberLink PhotoDirector 5 Available on: Mac/PC Price: £80/\$100



Import and assess Import your image into PhotoDirector by clicking on the plus symbol in the Project tab. Once imported, use the Zoom and Pan tools (at the top-right) to assess the image and where it needs improving.



Begin with a mask Set Brush Size to 56, Feather to 80 and Strength to 100. Brush over the main highlights in your image. We can alter the exact area later on. This shows as a red mask for now.



Think regionally
Click on the Adjustment tab at the top and locate the Regional Adjustment tools, as the changes we need to make are only to the highlights. Click on the fourth option, Adjustment Brush.



Control exposure Reduce the Brightness slider to -25 to start things off. The red mask will disappear, showing the adjusted image. You can also reduce the Contrast slider to -6 to bring more detail back.

Finger painting

Tap on Brush and make sure Hardness

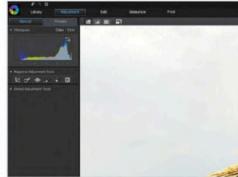
is 0%. Paint over the highlights to bring through

the adjustments made in the previous step.





Careful brush work Now that the differences can be seen, zoom out and continue to paint over the rest of the highlights that need retrieving. Lower the brush's Strength to 60 for less impact. Avoid areas of normal contrast.



O6 Colour edits
If you see any discolouration Colour edits appearing, such as too much yellow, head to the HSL/Color adjustments and reduce the Yellow slider until normal colour has returned to the area.



A new mask If the colour adjustments affect other regions of our image, create a new mask for these changes only. Press Cmd/ Ctrl+Z to undo in stages at any time. Try to only affect the overexposed areas.

Project your pictures

Create a projector and start sharing your cameraphone captures on the wall

There's no better way to share the photos you're proud of than on the big screen, but if you're a cameraphone user, the very nature of these small devices can make it difficult to share your recent snaps with a large group of people all at the same time.

Of course, you can invest in a digital projector that's designed for cameraphones, but they can be costly and most rely on your phone's battery to work. In this tutorial we'll show you a cost-effective way to project your pictures on the wall so that everyone can enjoy looking at your snaps at the same time. Follow our practical step-by-step guide and find out how to create your own projector at home using everyday items that will only cost you a few pounds.

164 Digital Photography for Beginners

Before you can get started, you'll need to get all of the necessary equipment together. A shoebox, cameraphone and magnifying glass are essential to the steps, and although admittedly a magnifying glass is not one of your typically everyday items, they are inexpensive and easy to pick up from the shops or online.

A good selection of photographs that you can project is also important, so take some time to organise your photo albums before you begin. Creating a slideshow using an app such as PicFlow (free on iOS/Android) is a great way to have your pictures play in a loop. You could even include sound, provided you have portable speakers, which could be connected to your cameraphone but positioned outside of the projector.

What you'll need...

- Cameraphone stand
- ✓ Shoebox or large cereal box
- ✓ Magnifying glass
- Sticky tape
- ✓ Stanley knife
- ✓ Pencil
- ✓ Slideshow of images

We used...

- ✓ iPhone with stand
- ✔ PicFlow a photo slides app

You could use...

- Any cameraphone
- ✓ A makeshift cameraphone stand
- ✓ Large cereal box
- ✓ Other slideshow apps



Build your projector Share your cameraphone captures on the wall



Trace an opening need together. A shoebox is ideal, but a large cereal box can work just as well. Now trace around the magnifying glass on one of the short outer edges of the shoebox.



Cut a hole 2 Cut a noie
Take a Stanley knife and carefully cut inside the circle so that the magnifying glass can sit flush against the shoebox. You can cut a small hole at the back of the box for your phone's power cable or speakers.



Secure the magnifying glass Open your shoebox and position the magnifying glass against the hole. Remove the handle or tape it securely against the box. Add tape around the edges of the glass as well, to ensure it's firmly in place.



Select your slideshowTo project a stream of images you'll need to create a slideshow. You can do this using an app such as PicFlow. Once created, select your slideshow and increase your screen brightness to full power.



Flip the screen You will need to flip the screen through your phone's settings so that your slideshow plays upside down. As the light passes through the magnifying glass, the images will be projected the right way up.



Position your phone As your phone will need to sit upright in a landscape orientation inside the shoebox, you'll need a stand. Some cases will work, or you can create a stand using a paper clip or blu-tack to hold it in place.

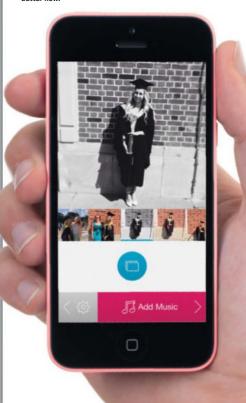


Focus and play Use a white wall or sheet in a dark room to play your slideshow on. Put your cameraphone in the shoebox at the far end and slowly move it forward until it appears in focus on the wall. Press play and enjoy!

Make a slideshow

Create a slideshow on your cameraphone

Build a slideshow of images using apps such as PicFlow, which are available to download onto your cameraphone via the App Store or Google Play. By using a specialist slideshow app, you'll be able to select only the shots you want to share on the big screen, as well as include music, adjust the timings



Store and share your photos in the cloud

Securely back up, store, access and share your photos With Dropbox Available on: Mac/PC Price: From free

What you'll need...

- ✓ Internet access
 ✓ Photos
- Digital device: computer, smartphone or tablet

We used...

✓ Dropbox

You could use...

- ✓ Google Drive
- ✓ iDrive
- ✓ OneDrive

What you'll learn...

- ✓ How to upload photos to the cloud
- ✓ How to share images
- ✓ The best photo options for you

Base camp

If you ever get lost icon here to return to

Browse

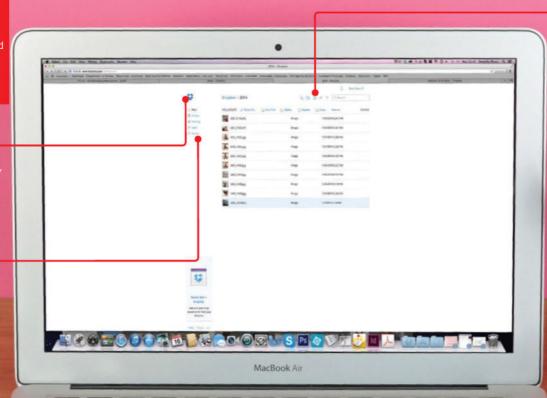
Browse your files, folders and links from this menu on the left. Double-click on images in Photos to view full screen

Cloud storage has become a big part of the modern photographer's life, eliminating the risk of crashing hard drives, loss or theft. The cloud is simply the term used to describe a virtual place where you can safely store you are, on any machine or digital device with Wi-Fi.

There are a lot of different cloud-storage companies available, with differing upload and sharing options.

Google Drive and Dropbox are two of the more popular when they see new photos in specific folders after their

Most sites have built-in sharing options to socialmedia sites, and some help you edit and create digital projects, even via compatible apps.



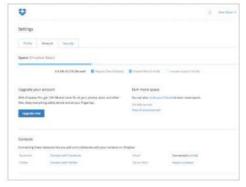
Upload

Upload images create new folders

Store and share photos Utilise Dropbox's cloud storage



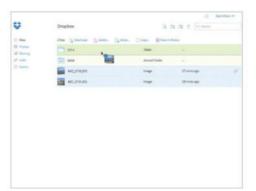
Set up and log in the instructions to set up an account. When you're up and running and logged in, you will be in the main home screen. You should see your name in the top-right.



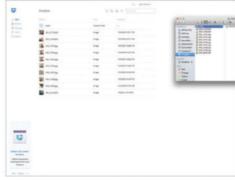
Storage space Click on the blue arrow to the right of your name. In this menu you'll see available storage. Click on Settings to access further options. Upgrade your account for more storage within this menu.



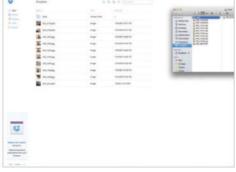
Upload image option 1 There are several ways to upload images. The simplest is from the Dropbox home screen. Click the Dropbox icon in the top-left corner, then drag and drop photos into this area. Wait for them to show.



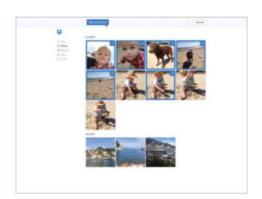
Upload option 2 Click on the Upload icon. Hold down Shift to select multiple images, and hit OK to upload. To keep your images tidy, click on the New Folder icon, then drag and drop images into the folder.



Upload option 3 Download a Dropbox desktop icon by selecting Install from the drop-down menu. Follow the instructions. When set up, drag and drop photos into this folder. It will sync automatically when online.



Share a link To share images, click on the album or photos you wish to share, then click on the Share link at the top of the home screen. Choose to send an email or share via Facebook or Twitter, then press Send.



Share selected photos An alternative way to share photos is to click on Photos from the menu on the left of your screen, Cmd/Ctrl-click on the images you wish to share, then press the big blue Share button.

3 of the best... Cloud-sharing websites



Google Drive

It has the same features as Dropbox and is also Mac and PC compatible. It has a whopping 15GB of free space before you may need to upgrade.



Available on Mac and PC with 5GB of free storage space. Back up and share images and videos from your devices and directly from Facebook



OneDrive

OneDrive, previously SkyDrive, is a Microsoft program for Mac and PC. It has 7GB of free storage and allows quick social-media sharing.

Prepare your photos for print

How to get your snaps up to scratch and looking their best before you print

Photo prints are a lasting keepsake and a fantastic way to share your recent adventures with family and friends. Whether you want them to adorn your walls in frames or fill up the family album, they're quick and easy to produce at home or even order from an online print service.

But before you rush in and prepare the ink and paper, it's important to ensure your shots are actually ready to print. For the best results there are a few necessary editing steps you need to take using your preferred computer software.

In this easy-to-follow tutorial, we'll show you how to get your shots up to scratch in Photoshop. You'll discover how to change an image's colour profile from RGB to CMYK to ensure that prints match up perfectly with what you see on screen. You'll also learn how to enhance contrast, colour hues and

What you'll need...

- ✓ Start image✓ Editing software

We used...

✓ Photoshop

You could use...

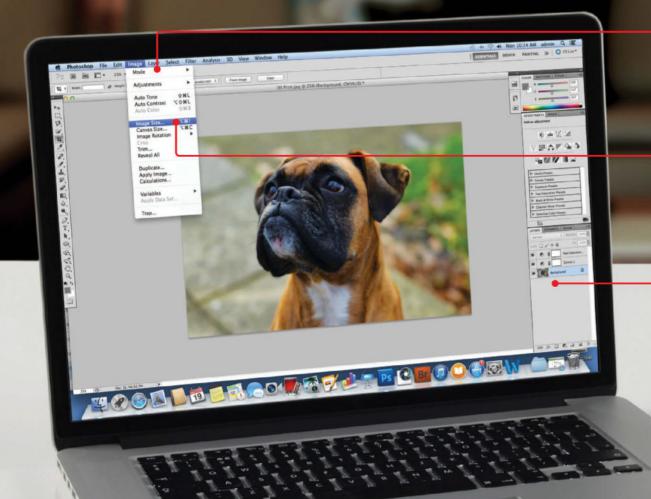
- ✓ Gimp

What you'll learn...

How to adjust your shots so they're ready for print

crop in for a better composition. We've even covered sharpening shots using the Unsharp Mask tool, as well as how to adjust the image dimensions and resolution before you save and print.

And if you also happen to be keen to share your favourite images online, check out the three-step mini tutorial on the right, as we explain how to optimise your photos for viewing on the internet.



Mode

Ensure you change your photo's colour space to CMYK before printina via Mode from the Image menu

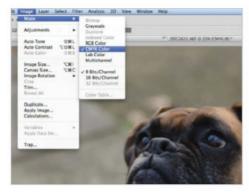
Image Size

Check your image is the correct size and resolution from the Image Size dialog

Layers palette

All of your adjustment layers that enhance contrast and colour hues will appear in the Layers palette. Flatten these before vou save

Optimise your images Adjust shots so they're ready for print



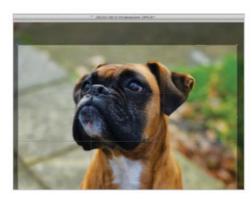
Change colour space Before you edit, go to Image>Mode> CMYK Color. CMYK is the preferred choice for most printers; your image may look a little washed out now but we'll show you how to enhance it in the next steps.



Increase contrast Enhance contrast by selecting Curves from the 'Create new fill or adjustment layer' tab in the Layers palette. Add two anchor points at either end of the diagonal line and pull into a subtle 'S'.



Enhance colours To punch up the colour tones, select the Hue/Saturation tool from the Adjustment layer tab. Work through the colour hues in the Master drop-down menu. Increase the Saturation slider for each hue.



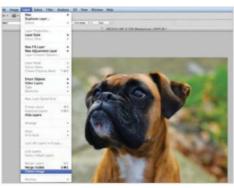
Crop in closer Strengthen the composition by clicking the Crop tool and selecting the entire image. Hold down Shift to constrain proportions as you drag in one of the corners. Move the selection, then hit enter.



Sharpen the shot Always sharpen before you print. Select the Background layer and go to Filter>Sharpen>Unsharp Mask. Increase the Amount slider to 100% and then slowly drag the Radius slider up between 1.2-1.8 pixels.



Adjust image size Resize your image to fit the print dimensions via Image>Image Size. Select Constrain Proportions and input the width and height within the Document Size section. Ensure Resolution is set to 300ppi.

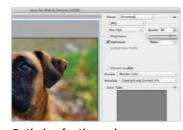


Flatten and save Before you save, flatten all of the working layers via Layers>Flatten Image. Now go to File>Save As and save the image in JPEG format. You can now print your photo at home or via an online service.

Optimise for web viewing



Adjust Image Size Go to Image>Image size. In the dialog box change the Width within Pixel Dimensions to 600 pixels; the Height will adjust automatically



Optimise for the web Now go to File>Save for Web & Devices, Ensure JPEG is selected, Quality is set to Very High and 80 with the Optimized box ticked.



Convert colour and save To ensure colours appear correct online, select Covert to sRGB. You can also select to include Copyright and Contact info. Now select Save.

Create photo books online

What you'll need.

- Internet browser Photos to include
- We used... MacBook Air

You could use... Any computer with internet connection

Use Blurb's independent publishing website to make printed or digital photo books

There are many websites and services that help you to create photo books, which are a perfect way to display your photos.

Whether you want to make a portfolio of your work, or put together a family album, creating a book is a great way to show off your images and keep them all together in one place. Blurb is a website that lets you create eye-catching photo books in five different sizes, with a wide range of paper

and cover options available to help you customise your project.

There are four different ways to create your photo book, and the easiest way is via the online book editor, Bookify, which allows you to design a custom photo book using a pre-designed template and store your photos and projects online. For more control, you can make your own custom layouts with Blurbs's downloadable book

editor, and more advanced users can use their publishing tool of choice and print a book from a PDF file.

When you use the online book app, uploading photos for your project is easy, from Facebook, Flickr and other sources. We uploaded them from our computer for the highest image quality. Unlike other sites, when you've finished your creation you can then publish it online too.

Add the images

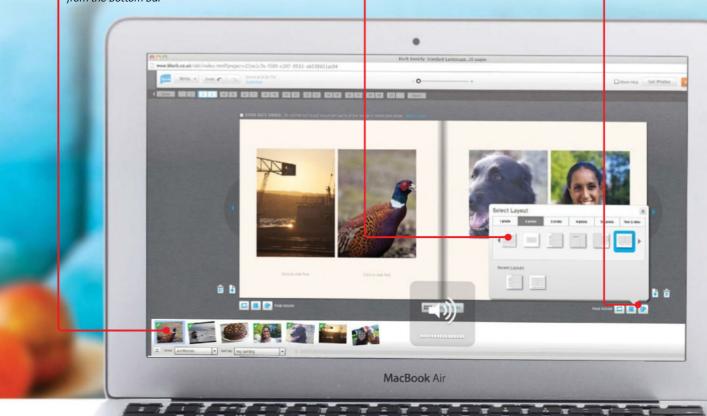
You can quickly add photos to each page by dragging and dropping your uploaded shots from the bottom bar

Alter the lavout

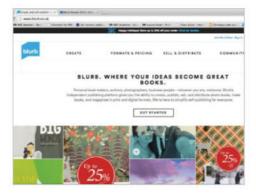
It's easy to change the layout of your pages, depending on how many photos you want to include

Presentation choices

Selecting the palette icon allows you to change the page's background colour and horder



Print your photos Use Blurb to design a book



Get started When you visit the Blurb website. click 'Get started' to see the list of options for creating your book. We suggest selecting 'Make a book online' to start the process, as it's fast and easy for simple projects.



Make it personal While you wait for your images to upload, select your cover type from the menu on the left. You can then add titles and choose the background colour. Select Next Page to begin the inside.



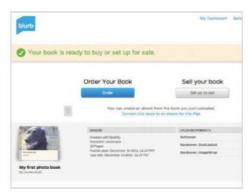
Manage pages When you've finished, go to Manage Pages for an overview of your book. Select and delete any blank pages. Next, click Preview and Order in the top-right corner. You'll then be prompted to make an account.



Choose options Select the book size and style from the drop-down menus. Don't worry if you're not sure, as you'll be able to change the page layout after this point. Bookify will open after you click Choose.



Create the inside Select a layout for each page, then drag and drop your uploaded images to where you want them. We recommend that you tick Show Help from the top menu if you're unsure what each button does.



Publish your book After signing in, your book will be saved to your private bookstore, ready to buy or set up for sale. Click Order to complete the process, choosing the paper you want it to be printed on, then adding it to your cart.



Find images Upload the photos to appear in the book, either from your computer or a social media account. We recommend clicking Upload to get images from your computer to ensure that they are the highest quality.

3 of the best... Photo book providers



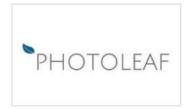
Bob Books

Unlike Blurb, you can choose to have the pages lie flat when the book is opened. You'll need to download a program to create your book.



Albelli

You can create a book online of up to 70 pages, or use the downloadable software to a maximum of 120 pages, and there's a wide range of sizes.



Photoleaf

The downloadable design software is easy to use. if a little more basic than Blurb's. There are extra options for printing on thick paper.

Photography glossary

What does it all mean? We take a moment to talk about key phrases you're likely to come across in photography



Aperture

Aperture decides how much light is let in to the camera, and is measured on a scale of f-numbers. This setting also dictates how much of the image is in or out of focus.

> SMALL APERTURE - A small-sized aperture of f11, f16 or f22 keeps objects in the distance looking sharp.

LARGE APERTURE – Shooting with a large-sized aperture of f2, f2.8 or f4, will make objects in the distance appear out of focus, placing emphasis on the main subject closer to the lens.

APERTURE PRIORITY MODE - This lets you choose the aperture with which you need to shoot. The camera will automatically control other important settings in the process.

Colour cast

Colour cast describes the tinting that an image may have due to the type of lighting used. This could be due to either wrong settings or for creative effect.

Contrast

Contrast is the vividness of the colours and tones in an image, and how much they stand out from subject to subject.

Exposure

Exposure describes the amount of light that has entered the camera to form an image. This is dependent on camera settings being correctly balanced, so that enough light is captured for a perfect exposure.

> **OVEREXPOSE** – If an image is overexposed, too much light has entered through the lens and the subject appears 'bleached' out, or far too white.

UNDEREXPOSE – Underexposure is when not enough light has entered the lens, and images look dull and lack-lustre in their contrast and colour.

LONG EXPOSURE - Light has been allowed to enter the camera for extended periods. This is usually put to use to create movement in landscape or sports photography.





Filters

Filters can be applied over the lens for replicating certain styles or effects. Some types include colour, grain and lighting effects. A lot of compacts will also add in-camera filters.

Focal lengths

Measured in millimetres, camera lenses have various focal lengths, which are used to zoom in or out on a subject. Focal lengths can be fixed, made to extend to huge distances, or to capture subjects close up.

> TELEPHOTO - Lenses which are telephoto are used to capture subjects that are in the distance. These lenses are popular with sports and wildlife photographers, using a lens with a focal length of 200-400mm, for example.

> WIDE-ANGLE - Lenses that have a wide angle cover a very broad field of view. Focal lengths include 15-30mm and these are extremely useful for landscape photography.

FISH-EYE – Fish-eye lenses distort the scene you are shooting in order to produce a sometimes-abstract composition, almost creating a bubble effect. The focal lengths involved in fish-eye photography can be 10mm or less.

HDR

HDR stands for high dynamic range and describes an image that has strong details, lighting and colours throughout.

Histogram

A histogram like the one below is used in photography to assess the lighting pattern through any given image. It shows which areas are most inside the visible spectrum.

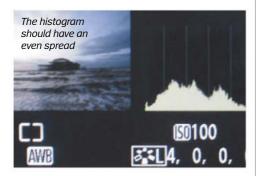


Image stabilisation

Either built into a lens or in-camera, image stabilisation counter-balances unstable movement. This helps to reduce the amount of blur caused by hand movement.

IS₀

This is how sensitive the camera sensor is to light, starting as low as ISO 64 (not very sensitive) and up to ISO 3200 or above (very sensitive). Sensitive ISO ratings produce the most distortion, however.

JPG

JPG is used in all digital cameras to capture images in a compressed but high-resolution format. Images are portable but they cannot be enlarged.

Live view

Live view is available with DSLR cameras and it allows you to use the screen to compose an image. This is instead of using the viewfinder.

Macro

Macro is the art of capturing subjects at extreme closeness, creating heavy blurring in the process. Subjects can be larger than they are in real life.

Megapixels

The number of pixels in an image is measured in megapixels (mp). The more megapixels, the larger the resolution and printable size of the image.

Metering

Metering is the way in which the camera analyses the lighting of the scene to make the exposure, for example, using just the central part, or an average. Metering modes are altered according to the scene and also the subject.

> SPOT, OR PARTIAL, METERING - In this setting, the camera takes a light reading from the centre of the scene and calculates the exposure. Light in the background is not considered.

EVALUATIVE METERING – This takes the entire scene's lighting into account to make the exposure. It's also ideal if you're not sure which setting to use, or if the scene is constantly changing.

CENTRE-WEIGHTED METERING - This metering system is where the camera uses the most central part of the scene to calculate the exposure, as well as some of the surrounding light. It's halfway between Spot and Evaluative metering.



Noise

Created by the lack of light in a scene, noise is the distortion of pixels mainly seen in the shadow areas of an image. Noise occurs with sensitive ISO ratings.





Prime lens

A prime lens has a single, 'fixed' focal length, with no zoom function, for example 50mm. These are popular for their excellent build quality and advanced optics.

RAW

RAW images are uncompressed and high-quality. They have a level of detail that is second-to-none in post-shoot editing. This is a standard feature of DSLR cameras.

Saturation

The strength, or amount, of colour in an image is described as 'saturation'. A highly saturated image has unusually strong colour, and can look unnatural.

SD/SDHC/SDXC

These are common memory cards that many compact and DSLR cameras use to store images. Measured in gigabytes, the larger the card size, the more photos you can shoot.

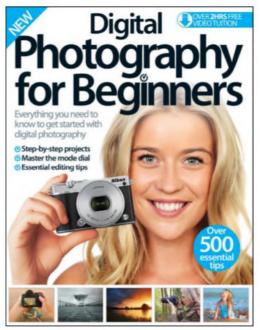
Shutter speed

Shutter speed is the length of time that the camera sensor is exposed to light. Measured in fractions of a second, fast speeds prevent blurring.

White balance

White balance is used to keep the colour of light in an image looking natural (as if shot in daylight). Different types of white balance include tungsten, flash and fluorescent.





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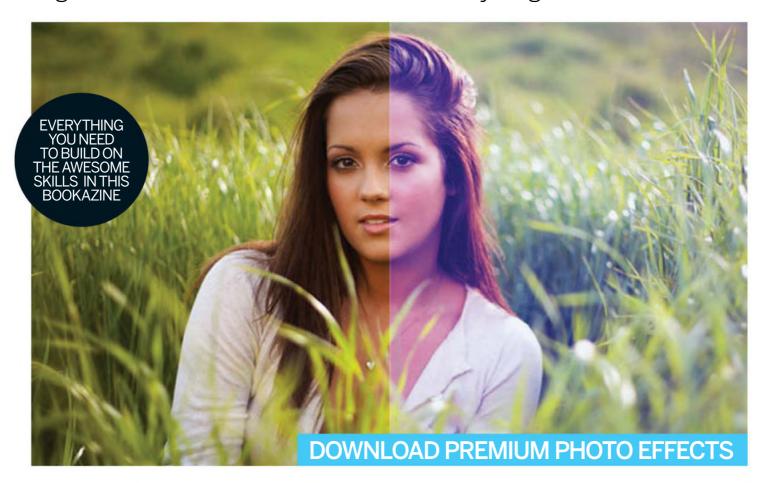
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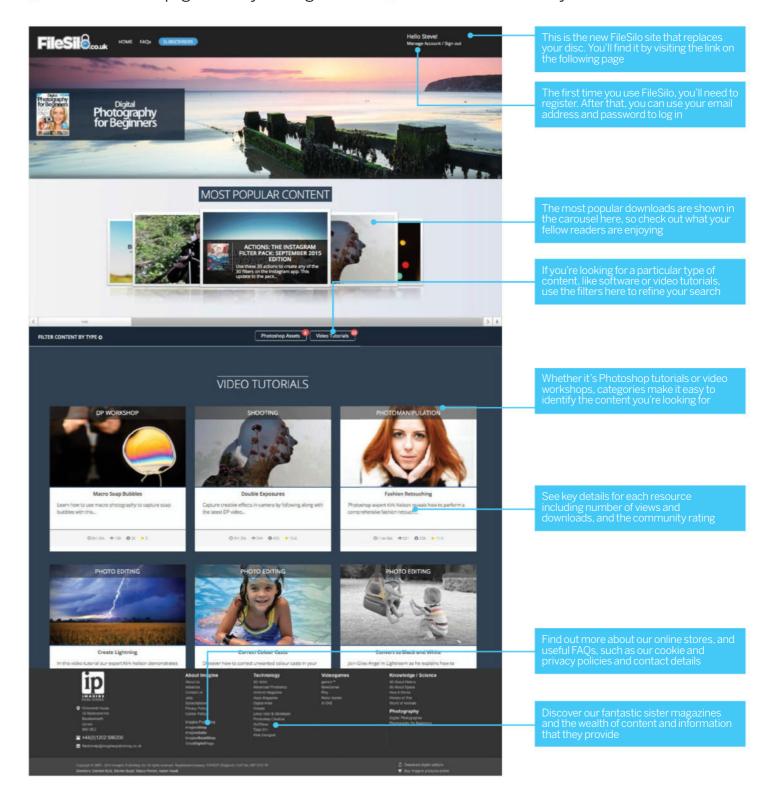
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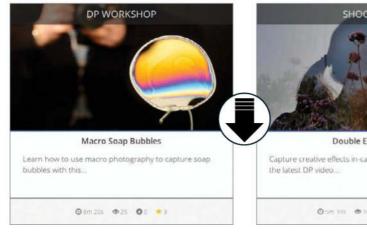
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